City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Sewer Lake Line Replacement at Meydenbauer Bay**
Proposal Address:	99th Ave NE (Meydenbauer Beach Park and Meydenbauer Bay Marina)
Proposal Description:	The applicant requests a Shoreline Substantial Development Permit to abandon in-place approximately 1,250 feet of sewer lake line within Meydenbauer Bay and to install a new sewer line landward of the ordinary high water mark.
File Number:	**12-123801-WG**
Applicant:	**Bellevue Utilities Department**
Decisions Included:	Shoreline Substantial Development Permit (Process II. LUC 20.30R)
Planner:	Kevin LeClair, Planner
State Environmental Policy Act Threshold Determination:	**Determination of Non-Significance** Carol V. Helland, Environmental Coordinator Development Services Department
Director's Decision:	**Approval with Conditions** Carol V. Helland, Land Use Director Development Services Department

Application Date:	August 29, 2012
Notice of Application Publication Date:	October 11, 2012
Decision Publication Date:	January 17, 2013
SEPA Appeal Deadline:	January 31, 2013
Shoreline Permit Appeal Deadline:	February 7, 2013

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision. Appeal of the Shoreline Substantial Development Permit shall be filed with the Shoreline Hearings Board on the date noted for appeal of the decision.

DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 100th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Bellevue Utilities Department

LOCATION OF PROPOSAL: 419 98th Ave NE; 9807, 9817, and 9821 Lake Washington Blvd NE; 1 and 2 99th Ave NE; and 100 100th Ave SE

NAME & DESCRIPTION OF PROPOSAL:
Sewer Lake Line Replacement at Meydenbauer Bay - Shoreline Substantial Development Permit to abandon in-place approximately 1,250 feet of sewer lake line within Meydenbauer Bay and to install a new sewer line landward of the ordinary high water mark.

FILE NUMBER: 12-127667-GH

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.

X This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **January 31, 2013**.

☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on_____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.

_____ January 17, 2013
Environmental Coordinator Date

OTHERS TO RECEIVE THIS DOCUMENT:
State Department of Fish and Wildlife
State Department of Ecology,
Army Corps of Engineers
Attorney General
Muckleshoot Indian Tribe

CONTENTS

Attachments

1. Environmental Checklist
2. Site Plan
3. Technical Memorandum – Wetland Delineation and Existing Conditions (November 19, 2012) – In project file

I. Proposal Description

The applicant is proposing to replace approximately 1,250 lineal feet of existing sewer lake line by constructing a new line onshore and abandoning the existing line in-place, along with the construction of an underground lift station landward of the ordinary high water mark to move the sewage out of the originating sewer lake line into the new line.

The proposal is considered development within the Shoreline Overlay District as defined in LUC 20.25E.010. A Substantial Development Permit is required for all development within the Shoreline Overlay District. The proposal is required to comply with the following performance standards:

- LUC 20.25E.080.B – General regulations applicable to all land use districts and activities
- LUC 20.25E.080.G – Clearing and grading regulations
- LUC 20.25E.080.U – Utilities regulations

The proposal is also within the Critical Areas Overlay District. The proposal is classified as repair and maintenance of a utility system, because the proposed sewer line is a replacement of the existing facility and the area of permanent disturbance within the critical area and critical area buffer is not expanding. Therefore, the proposal does not require a Critical Areas Land Use Permit. Compliance with critical areas performance standards shall be reviewed under the Shoreline Substantial Development Permit and the subsequent Clearing and Grading Permit.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The project site is located at Meydenbauer Beach Park and Meydenbauer Marina on the shoreline of Lake Washington. The proposal traverses the following properties from north to south: 419 98th Ave NE; 9807, 9817, and 9821 Lake Washington Blvd NE; 1 and 2 99th Ave NE; and 100 100th Ave SE. The proposal also crosses the public rights-of-way of 99th Ave NE and SE Bellevue Place.

The northern five properties consist primarily of mowed lawn on a relatively level bench between the shoreline. The southern two properties and the rights-of-way are also level, but covered almost entirely by asphalt paving.

The land/water interface along the entire project area is bulkheaded with either rockery or concrete retaining walls.

There is a 1,441 square foot, Category IV wetland in the path of the proposed sewer line. This wetland is below the threshold regulated as a critical area per LUC 20.25H.095. Its functions and values will be protected however through the implementation of best management practices to intended to maintain wetland hydrology and restoration of the temporary disturbance of the wetland vegetation. Other state or federal agencies may have jurisdiction.

B. **Zoning**

The project spans multiple zoning districts. The districts by property include:

- R-1.8 – 419 98th Ave NE
- R-3.5 – 9807, 9817, and 9821 Lake Washington Blvd NE; and 1 99th Ave NE
- R-30 – 2 99th Ave NE and 100 100th Ave SE

The project is also within the Shoreline Overlay District (LUC 20.25E) and the Critical Areas Overlay District (LUC 20.25H).

C. **Land Use Context**

The context of the project area is that of a public beach park, single-family residential properties and waterfront marina. The surrounding land uses include:

- Single-family residential to the north and east (R-1.8 and R-3.5, respectively)
- Multi-family residential also to east and south (R-30)
- A small sliver of office zoning at the southern end of the project area.

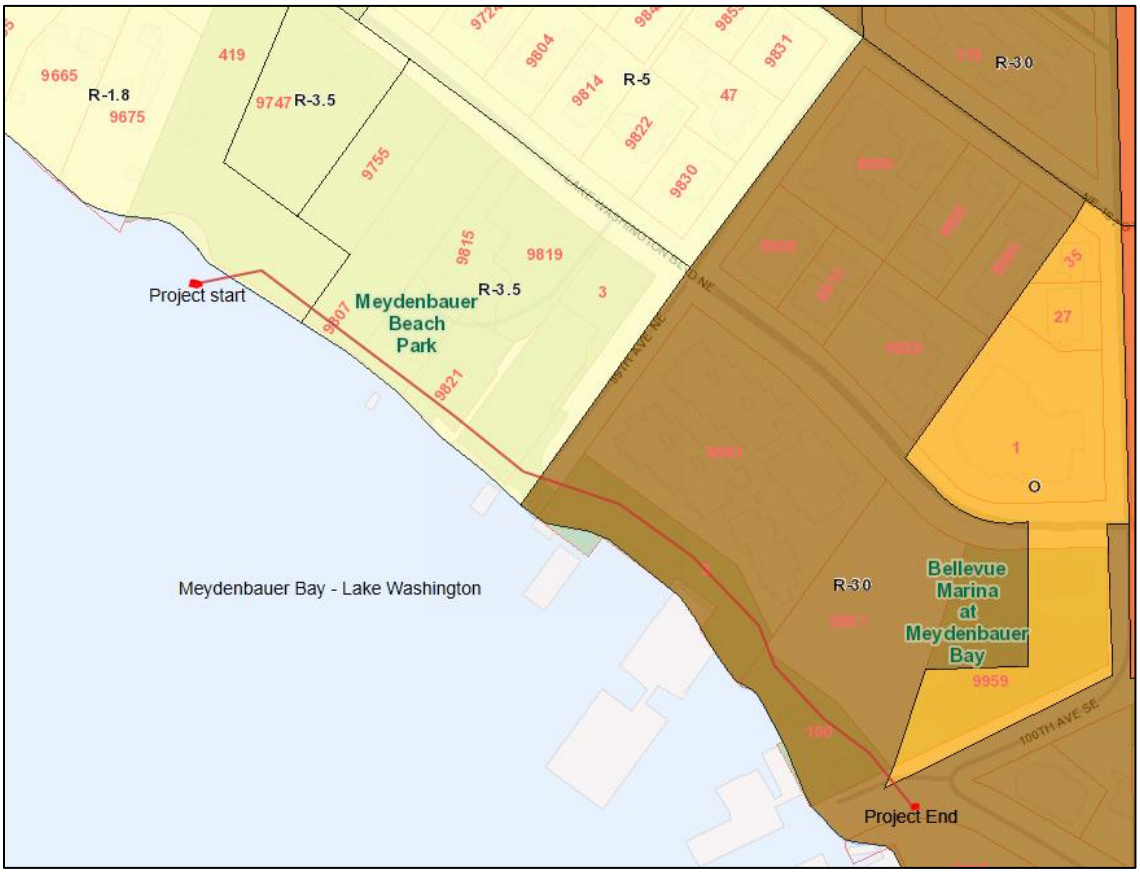


Figure 1: Zoning and Land Use Context

All of the project properties are owned and managed by the City of Bellevue. The northern-most property is part of the existing Meydenbauer Beach Park. The next several parcels were recently acquired by the Parks Department as part of the future

park development plans. The southern, paved parcels serve as vehicle access for the Bellevue Marina at Meydenbauer Bay, which is also owned and operated by the Bellevue Parks Department. The public rights-of-way are owned and managed by the Bellevue Transportation Department.

D. **Critical Areas Functions and Values**

i. Wetlands

Wetlands provide important functions and values for both the human and biological environment—these functions include flood control, water quality improvement, and nutrient production. These "functions and values" to both the environment and the citizens of Bellevue depend on their size and location within a basin, as well as their diversity and quality. While Bellevue's wetlands provides various beneficial functions, not all wetlands perform all functions, nor do they perform all functions equally well. However, the combined effect of functional processes of wetlands within basins provides benefits to both natural and human environments. For example, wetlands provide significant stormwater control, even if they are degraded and comprise only a small percentage of area within a basin.

ii. Shorelines

Shorelines provide a variety of functions including shade, temperature control, water purification, woody debris recruitment, channel, bank and beach erosion, sediment delivery, and terrestrial-based food supply.

Shorelines provide a wide variety of functions related to aquatic and riparian habitat, flood control and water quality, economic resources, and recreation, among others. Each function is a product of physical, chemical, and biological processes at work within the overall landscape. In lakes, these processes take place within an integrated system (ecosystem) of coupled aquatic and riparian habitats. Hence, it is important to have an ecosystem approach which incorporates an understanding of shoreline functions and values. The discussion presented herein emphasizes this ecosystem approach.

III. Consistency with Land Use Code Requirements:

A. **Zoning District Dimensional Requirements:**

The site is located in the R-1.8, R-3.5 and R-30 zoning district. No structures are proposed for development; therefore the dimensional standards do not apply.

B. **General Regulations Applicable to All Land Use Districts and Activities LUC 20.25E.080.B:**

i. Where applicable, all federal and state water quality and effluent standards shall be met.

The project is required to obtain a clearing and grading permit for the proposed work. This permit will require turbidity monitoring to ensure surface water is protected during and after construction and water quality standards are met. The project will also require permit approval from the Washington Department of Fish and Wildlife.

ii. If a property extends into the Shoreline Overlay District, the Shoreline Master Program Policies and these use regulations shall apply only to that portion of the property lying within the Shoreline Overlay District.

The proposal is within the Shoreline Overlay District and two residential land use districts. The "utility system" use is a permitted use in all of the respective land use zoning districts.

iii. All development within the Shoreline Overlay District shall be accompanied by a plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction in accordance with Part 20.25H LUC, City of Bellevue Clearing and Grading regulations, Chapter 23.76 BCC, and the Comprehensive Plan.

The proposal includes documentation describing the existing vegetation throughout project area. The applicant intends to prepare plan for restoration of temporary disturbance to ensure shoreline vegetation in the vicinity of the project area is protected and any disturbance is restored to pre-existing conditions. The applicant will also prepare a Construction Storm Water Pollution Prevention Plan that describes the best management practices that will prevent erosion during construction. The proposal is required to obtain a clearing and grading permit prior to commencing construction.

iv. Special care shall be exercised to preserve vegetation in wetland, shoreline and stream corridor bank areas in order to prevent soil erosion. Removal of vegetation from or disturbance of shoreline critical areas and shoreline critical area buffers, and from other critical area and critical area buffers shall be prohibited, except in conformance with Part 20.25H LUC and the specific performance standards of this section.

The proposed sanitary sewer line will traverse a 1,441 square foot, Category IV wetland. This size and category of wetland is not regulated as a critical area, per the City of Bellevue's Land Use Code (LUC 20.25H). The proposal accounts for the presence of the wetland and provides for its protection and restoration following construction. The applicant has provided details in the project plans that ensure the wetland area will be protected through the construction of "clay dams" on either end of the trench containing the new sewer line. This will ensure that wetland hydrology will be protected and wetland conditions will remain. Finally, the applicant has provided native plant restoration plans for the area that will further protect the functions and values of the wetland.

v. Maximum height limitation for any proposed structure within the Shoreline Overlay District shall be 35 feet, except in land use districts with more restrictive height limitations. The method of measuring the maximum height is described in WAC 173-14-030(6). Variances to this height limitation may be granted pursuant to Part 20.30H LUC.

No above ground structures are proposed. This standard is not applicable.

vi. The Bellevue Shoreline Master Program, in conjunction with existing Bellevue land use ordinances and Comprehensive Plan policies, shall guide all land use decisions in the Shoreline Overlay District.

The proposal is supported by the following policies from the City's Shoreline Master Program and Comprehensive Plan, respectively:

Shoreline Policy SH-14 – Maintain water quality to permit swimming and other recreational uses.
Utilities Policy UT-2 – Manage utility systems effectively to provide reliable quality services.
Environmental Policy EN-28 – Utilize best management practices and technology in city projects to demonstrate effective environmental stewardship and long-term fiscal responsibility.

The proposal seeks to mitigate potential risks to Lake Washington and Meydenbauer Bay associated with the deteriorating asbestos concrete sewer line. A failure of this line would be extremely detrimental to water quality and negative impact the recreational and aesthetic quality of the Bay.

The proposal will provide for reliable management of the sewage and in a facility that minimizes long-term impact to the most critical natural resource in the vicinity, Lake Washington.

vii. Any development within the Shoreline Overlay District shall comply with all applicable Bellevue ordinances, including but not limited to the Bellevue Land Use Code, Sign Code, and clearing and grading regulations.

The proposal includes preliminary plans for clearing and grading that both preserves shoreline vegetation in the vicinity of the project area to the greatest extent practicable and restores all temporary disturbance to pre-existing conditions. The plan also includes best management practices to prevent erosion during construction. The proposal is required to obtain a clearing and grading permit prior to commencing construction.

viii. The dead storage of watercraft seaward of the ordinary high water mark of the shoreline is prohibited.

No dead storage of watercraft is proposed. This standard is not applicable.

ix. Where applicable, state and federal standards for the use of herbicides, pesticides and/or fertilizers shall be met, unless superseded by City of Bellevue ordinances. Use of such substances in the shoreline critical area and shoreline critical area buffer shall comply with the City's "Environmental Best Management Practices."

The applicant will include standards regarding the use of pesticides and fertilizers on the final project plans that will be reviewed and approved as part of the required clearing and grading permit.

x. Adequate storm drainage and sewer facilities must be operational prior to construction of new development within the Shoreline Overlay District. Storm drainage facilities shall be separated from sewage disposal systems.

The proposal is for adequate sewer facilities and the system is completely separate from the storm drainage system.

C. **Clearing and Grading Regulations LUC 20.25E.080.G:**

i. All clearing, grading, excavating, and fill in the Shoreline Overlay District shall comply with the provisions of Chapter 23.76 BCC, now or as hereafter amended.

The proposal includes preliminary plans for clearing and grading that both preserves and restores shoreline vegetation in the vicinity of the project area. The plan also includes best management practices to prevent erosion during construction. The proposal is required to obtain a clearing and grading permit prior to commencing construction. The review and approval of the clearing and grading permit will ensure compliance with the clearing and grading codes and standards in BCC 23.76.

ii. No clearing, grading, excavating, or fill shall be allowed within the shoreline critical area or shoreline critical area buffer except as permitted by this Part 20.25E, or in association with activities allowed under Part 20.25H LUC.

As stated above, the proposal is within the Shoreline Overlay District, the Critical Areas Overlay District and two residential land use districts. The "utility system" use is a permitted use in all of the respective land use zoning districts.

iii. Wherever the City determines that the act or intended act of clearing, grading, excavation or fill has become or will constitute a hazard to life or limb, or endangers property, or adversely affects the safety, use of, or stability of a public way, drainage channel or natural stream corridor, including siltation and sedimentation therein, the owner of the property upon which the clearing, excavation or fill is located or other person or agent in the City shall, within the period specified therein, terminate such clearing, grading, excavation, embankment or fill, or eliminate the same from the development plan, or modify the plans, as may be required so as to eliminate the hazard and be in conformance with the requirements of this Code.

The proposal is not expected to constitute a hazard to life, limb or endanger property or adversely affect the safety, use of, or stability of a public way, drainage channel or natural stream corridor. There will be temporary disturbance in the lake and in the area immediately upland as the new sewer line is installed, but the impacts will be temporary and will be restored pursuant to restoration plan meeting the standards of LUC 20.25H.210.

D. **Utilities Regulations LUC 20.25E.080.U:**

i. Compatible utilities shall be consolidated within a single right-of-way. After construction, all areas shall be restored to their pre-project configuration, replanted with suitable vegetation, and provided maintenance until newly planted vegetation is established.

The proposal includes preliminary plans for clearing and grading that both preserves and restores shoreline vegetation in the vicinity of the project area. The plan also includes best management practices to prevent erosion during construction. The proposal is required to obtain a clearing and grading permit prior to commencing construction. There will be temporary disturbance in the lake and in the area immediately upland as the new sewer line is installed, but the impacts will be temporary and will be restored pursuant to restoration plan meeting the standards of LUC 20.25H.210.

ii. Utilities proposed or located in the shoreline critical area and shoreline critical area buffer shall comply with the requirements of LUC 20.25H.055.

The requirements of LUC 20.25H.055 for the proposal includes the following standards:

LUC 20.25H.055.C.1- Repair and maintenance includes replacement of facilities and systems, or expansion so long as the area of permanent disturbance of the critical area or critical area buffer is not expanded. As applicable to public rights-of-way, private roads, access easements, parking areas and driveways, repair and maintenance also includes removing and replacing improvements within the area of permanent disturbance, and expansion of paved areas, so long as the area of permanent disturbance within the critical area or critical area buffer is not expanded.

LUC 20.25E.080.B – Discussed above.
LUC 20.25E.080.U – Discussed above.

The proposal constitutes replacement of an existing facility and results in no new permanent disturbance within the critical area or critical area buffer. All temporary disturbance will be restored pursuant to a restoration plan that complies with LUC 20.25H.210.

IV. Public Notice and Comment

Application Date:	August 29, 2012
Public Notice (500 feet):	October 11, 2012
Minimum Comment Period:	November 19, 2012

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on October 11, 2012. It was mailed to property owners within 500 feet of the project site. Two comments have been received from the public as of the writing of this staff report.

The first comment was from a neighbor, Pegi Barthelow. Her comment related to the timing of the construction and impacts to vehicle access during construction. Mrs. Barthelow was told that vehicle access will need to be provided continuously in order to ensure emergency vehicle are able to serve the existing buildings. She was also provided with the standard construction noise hours that specify that construction generated noise is only allowed between 7 AM and 6 PM on weekdays, between 9 AM and 6 PM on Saturdays, and prohibited on Sundays. She was also informed that any deviation from this standard would require a construction noise exception permit.

The second comment was submitted by Karen Walter with the Muckleshoot Indian Tribe Fisheries Division. Mrs. Walter recommended that the City enhance the area over the sewer line to be abandoned by adding spawning-sized gravels and smaller substrate for juvenile Chinook salmon habitat. In response, the applicant is proposing to install spawning gravels over the new portion of sewer line that connects the existing lake line to the new, upland sewer line.

V. Summary of Technical Reviews

A. **Clearing and Grading:**
The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

B. **Utilities**
The Utilities Department's Development Review Division has reviewed the proposed development for compliance with Bellevue Utilities' codes and standards. The Utilities Development Review staff found no issues with the proposed development.

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. **Earth and Water**
A temporary erosion and sedimentation control plan is discussed in the proposal's environmental checklist, and addresses restoring the site to its current condition as well as erosion and sedimentation management practices. Erosion and sediment control best management practices include the installation of silt fencing around the work area and covering exposed soils to prevent migration of soils to the lake. The applicant will also be required to submit information regarding the use of pesticides, insecticides, and fertilizers to avoid impacts to water resources. See Section X for a related condition of approval.

B. **Animals**
Lake Washington is known to support Chinook salmon and Sockeye salmon, as well as other anadromous fish species. The primary native fish in Lake Washington are cutthroat trout, northern pikeminnow, and prickly sculpin, while non-native fish include rainbow trout, adult yellow perch, smallmouth bass, and largemouth bass. These fish species and their habitat will be protected during the project construction through timing of the work to occur in the water. In addition, the applicant is proposing to install spawning gravel on top of the newly installed portion of sewer line that will connect the

existing sewer lake line to the new upland sewer line.

C. **Plants**
Mitigation for temporary and permanent disturbance will be approved pursuant to an approved restoration and monitoring plan. See Section X for related conditions of approval.

D. **Noise**
The site is adjacent to single and multi-family residences whose residents are most sensitive to disturbance from noise during evening, late night and weekend hours when they are likely to be at home. Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. See Section X for a related condition of approval.

VII. Changes to proposal as a result of City review

No significant changes were made to the proposal as a result of city review. The applicant has complied with all of the applicable performance standards and decision criteria.

VIII. Decision Criteria

Shoreline Substantial Development Permit Decision Criteria- LUC 20.30R
The Director of the Development Services Department may approve or approve with modifications if:

1. The applicant has carried the burden of proof and produced evidence sufficient to support the conclusion that the application merits approval or approval with modifications; and

Finding: As discussed in Section III of this report, the applicant has demonstrated, with sufficient evidence, that the proposal merits approval with conditions. The conditions are discussed in Section X of this report.

2. The applicant has demonstrated that the proposal complies with the applicable decision criteria of the Bellevue City Code; and

Finding: As discussed in Section III of this report, the applicant has demonstrated, that the proposal complies will all of the applicable standards and regulations of the Bellevue City Code and Land Use Code. Compliance with these standards will be further guaranteed through imposition of the conditions of approval discussed in Section X of this report.

3. The applicant has demonstrated that the proposal is consistent with the policies and procedures of the Shoreline Management Act and the provisions of Chapter 173-14 WAC and the Master Program.

Finding: As discussed in Section III of this report, the applicant has demonstrated that the proposal is consistent with the policies and procedures of the Shoreline Management Act and Bellevue's Shoreline Master Program.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposal to replace approximately 1,250 lineal feet of sewer lake line with a new line located above the ordinary high water mark within shoreline jurisdictional area of Lake Washington at Meydenbauer Bay.

Time Limitation of Approval: In accordance with LUC 20.30R.175 a Shoreline Substantial Permit automatically expires and is void if the applicant fails to file for the necessary development permits within two years of the effective date of the approval, unless an extension has been granted.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Land Use Code- BCC 20.25H	Kevin LeClair, 425-452-2928
Noise Control- BCC 9.18	Kevin LeClair, 425-452-2928

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. Restoration of Temporary Disturbance: Prior to the approval and issuance of the required development permit, the applicant shall submit a plan that identifies the area of temporary disturbance around the proposed development and proposes a restoration plan that restores the area to a condition equal to or better than the condition prior to the proposed development. The restoration of temporary disturbance shall be monitored for a period of one-year from the date of acceptance to ensure the restoration effort has been successful. In order to be considered successful, 100% of the native plants shall be alive within one year of acceptance and the restoration area shall be entirely free of non-native invasive plants. A monitoring report meeting the

minimum monitoring and reporting standards establish by the director shall be submitted to verify success.

Authority: Land Use Code 20.25H.220.H
Reviewer: Kevin LeClair, Land Use

2. Restoration of Temporary Wetland Disturbance: Prior to the approval and issuance of the required development permit, the applicant shall submit a plan that demonstrates compliance with wetland performance standards in LUC 20.25H.100. These include:

A. Lights shall be directed away from the wetland.
B. Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the wetland, or any noise shall be minimized through use of design and insulation techniques.
C. Toxic runoff from new impervious area shall be routed away from the wetlands.
D. Treated water may be allowed to enter the wetland critical area buffer.
E. The outer edge of the wetland critical area buffer shall be planted with dense vegetation to limit pet or human use.
F. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

This plan shall also identify the area of temporary disturbance within the traversed wetland and propose a restoration plan protecting the wetland hydrology, restoring wetland soils and restoring wetland vegetation to a condition equal to or better than the condition prior to the proposed development. The restoration of temporary disturbance shall be monitored for a period of one-year from the date of acceptance to ensure the restoration effort has been successful. In order to be considered successful, 100% of the native plants shall be alive within one year of acceptance and the restoration area shall be entirely free of non-native invasive plants. A monitoring report meeting the minimum monitoring and reporting standards establish by the director shall be submitted to verify success.

Authority: Land Use Code 20.25H.100 and 20.25H.220.H
Reviewer: Kevin LeClair, Land Use

3. Rainy Season restrictions: Due to the proximity to Lake Washington no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A,
Reviewer: Janney Gwo, Clearing and Grading

4. Pesticides, Insecticides, and Fertilizers: The applicant must submit as part of the required Clearing and Grading Permit information regarding the use of pesticides, insecticides, and fertilizers in accordance with the City of Bellevue's "Environmental Best Management Practices".

Authority: Land Use Code 20.25H.220.H
Reviewer: Kevin LeClair, Land Use

5. Noise Control: Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: Kevin LeClair, Land Use

6. State and Federal Permits: Due to the project location and scope, the proposal is required to obtain permission to proceed from the Washington State Department of Fish and Wildlife, Washington Department of Ecology, and the Army Corps of Engineers. Prior to issuance of the required clearing and grading permit, the applicant shall provide documentation to the City of Bellevue Development Services Department that the agencies have reviewed and approved the proposal. Any conditions imposed by the agencies, shall be adopted as conditions of approval on the clearing and grading permit.

Authority: Land Use Code 20.30R.155
Reviewer: Kevin LeClair, Land Use

Attachment 1
Revised SEPA Checklist
Submitted December20, 2012

City of Bellevue Submittal Requirements	27a

ENVIRONMENTAL CHECKLIST

4/18/02

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

BACKGROUND INFORMATION

Property Owner: City of Bellevue – Parks Department

Proponent: Contact Person: City of Bellevue Utilities Dept. Jay Hummel, PE / Senior Engineer
(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: P.O Box 90012 – Bellevue WA 98009-9012

Phone:425-452-4160 (Jay Hummel)

Proposal Title: Sewer Lake Line Replacement at Meydenbauer Bay Project

Proposal Location: 99th Ave NE – Bellevue Meydenbauer Bay Park and Marina (See Exhibit A)
(Street address and nearest cross street or intersection) Provide a legal description if available.(See Exhibit B/Sheet 2A)
Please attach an 8 ½" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description: The Sewer Lake Line Replacement at Meydenbauer Bay Project includes construction of a gravity sewer Line to replace an aging and failing sewer line in Lake Washington. The existing off shore sanitary sewer line will be flushed and capped before it is abandoned in place. The new on shore proposed sewer line would be located within the existing Meydenbauer Beach Park and Bellevue Marina area. The replacement sewer line is proposed to be 1,250 lineal feet in length. The primary construction activity will be trenching in an upland area from the marina parking lot near the Grange pump station, northwest to the beach area of the park, and then making an in-water connection adjacent to the western edge of the existing park dock. The proposed sewer line alignment would temporarily disturb 550 square feet of class IV wetland and 3,500 square feet of buffer. Approximately 0 .4 acres (17,400 sf) of lawn and shrubs will be cleared for the trenching portion of the project. 750 sf of park pathway will be reconstructed and an addition of 200 sf of pathway will be added along the eastern portion of the park sidewalk for future maintenance vehicle access. The trenching activity will include approximately 2,000 CY of excavation and 2,000 CY of fill for the sewer line replacement, a new pump station and valve vault. There will be approximately 100 +/- feet of in-water construction along the Lake Washington Shoreline, within the City jurisdiction (See Exhibit C/Sheet 3B).

Construction of the in-water trench to connect the new onshore sanitary sewer will be covered with 2"minus round river rock to provide for Sockeye Spawning in the near shore area of Lake Washington.

Trenching for the new onshore sanitary sewer line will include boring and installing a steel casing under two existing residential buildings. Boring pits will be constructed to the north and the south of the structures to accommodate the boring equipment. Due to the presence of groundwater in the vicinity, the area around the boring pits will need to be dewatered. The dewatering process will require the collection of groundwater and discharging it into Lake Washington. The dewatering effort may take several weeks and may require include pumping several hundred gallons a minute. No water from the actual boring pits will be sent to Lake Washington. Any sediment laden water from the pits will be treated in Baker type tanks or similar technology and then discharged into the Sanitary Sewer system or hauled off site for disposal.

Along the proposed upland alignment of the sewer line, approximately 550 square feet of low function class 4 wetland and 3,500 square feet of wetland buffer will be temporarily disturbed during construction. Soil removed from the wetland and wetland buffer will be stockpiled on site and returned to the wetland and wetland buffer areas, consistent with the need for specific engineered bedding material to be placed under and around the new sewer line. Clay dams will be placed where the new sanitary sewer line enters and leaves the wetland area to prevent groundwater that feeds the wetland, from being diverted along the new sewer line.

The City of Bellevue has adopted a Master Plan for the Meydenbauer Bay Park and Marina Dec. 2010 (Resolution 8182) which the proposed sewer line replacement project is not tied to nor will it preclude or change any of the elements of that land use plan. All proposed elements of that master plan, which is a major redevelopment of the park will address final topography, final landscaping, urban design, and habitat enhancement by a proposed day lighting of the unnamed culverted creek at the northwest end of the park.

The proposed sanitary sewer line, including the new pump station is designed to serve the lake front residences and upland residences that are currently served by the existing off shore sanitary sewer. None of the future options, both on shore and off shore, for serving these same residences is precluded by this proposal.

10. Other

Estimated date of completion of the proposal or timing of phasing:

Proposed start date 2013 and completion 2014. The contractor will mobilize to the site and setup the construction staging area (proposed: Marina parking area) and temporary erosion and sedimentation control facilities along the project site. The upland gravity sewer pipe, force main pipe, manholes, service connections, and sewage pump station will be installed before any in-water work is completed. The connection to the existing lake line within Meydenbauer Bay will be made during the approved in-water work window. The final stages of construction will include surface restoration, hydroseeding and other necessary restoration activities.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There is an ongoing sewer system audit, in the form of a report, which is being conducted currently to identify long-term replacement and new construction area for the overall system. Extents of repairs needed are unknown presently in the overall sewer system upland and in-water. Upon completion of that report, the City of Bellevue Utilities Department will make a determination of the priority of repairs, replacement or new construction that will be required.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

1. Biological Evaluation – City of Bellevue 2006 Exposed Sanitary Sewer Lines (Aug. 2006)
2. Geotechnical Engineering Report– Meydenbauer Bay Sewer Lake Line (March 11, 2010)

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

No.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

1. City of Bellevue SEPA Checklist and Determination
2. City of Bellevue Shoreline Permit, 12-123801-WG
3. City of Bellevue Clearing and Grading Permit
4. City of Bellevue Land Use Application
5. US Army Corp – Section 10 Rivers/Harbors Act (JARPA/NEPA/Section 106 Concurrence)
6. US Fish and Wildlife – Section 7 Endangered Species Act Consultation
7. National Marine Fisheries Services – Section 7 Endangered Species Act Consultation
8. Washington State Hydraulic Project Approval (JARPA)

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

Land Use Reclassification (rezone) Map of existing and proposed zoning

Preliminary Plat or Planned Unit Development
Preliminary plat map

X Plan of existing and proposed grading
Development plans

X Shoreline Management Permit
Site plan

A. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: [Flat] Rolling Hilly Steep slopes Mountains Other

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope is upland from the project near the past-single family housing area (approx. 2 to 5% slope). The project site is less than 2% slope on average. (Exhibit D)

c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Vashon sub glacial till (Qvt) and Vashon Advanced Outwash (Qva)

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are no indications of unstable soils in the project impact area.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Overall, there will be approximately 0 .4 acres (17,400 sf) of lawn and shrubs along with two substantial trees that will be cleared for the trenching portion of the project. There will be a 750 sf of park pathway that will be reconstructed and 200 sf of pathway added along the eastern portion of the park sidewalk for future maintenance access. The trenching activity will include approximately 2,000 CY of excavation and 2,000 CY of fill for sewer line replacement, pump station, and valve vault construction underground. There will be approximately 100 +/- feet of construction in-water along Lake Washington Shoreline, within the City jurisdiction. (Exhibit C/Sheet 3B) The trenching will cross one wetland (Class IV) which has low ecological function and value as established during the Meydenbauer Bay Land Use Master Plan in the Wetlands Study (EDAW 2008 – Exhibit E)

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

It is not anticipated there will be erosion with implementation of Best Management Practices (BMPs) in conjunction with City regulations and a temporary erosion and sedimentation control plan (TESC).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Less than .002 percent of the site will be converted to impervious surface. Across the 2-1/2 acre site, only 200 square feet of additional impervious surface will be added.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Standard BMPs, TESC, and an approved clearing and grading plan will avoid and mitigate any limited impacts to the earth.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

There will be limited emissions from fugitive dust and construction vehicles during construction activity.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known or anticipated.

c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

A vacuum street sweeper will be utilized to remove dust and debris from pavement as directed by the City. Standard TESC and BMPs will control fugitive dust emissions and construction vehicle will be using federally regulated exhaust system for vehicle emissions.

3. WATER

a. Surface

(1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into it.

Lake Washington is adjacent to the park and marina and there is an unnamed culverted stream along the northern edge of the park. There are three (3) class IV wetlands in the middle of the park property. The palustrine wetland associated with the shoreline of the project area was categorized as a category IV wetland by EDAW staff in 2008 using the Washington State Wetland Rating System for Western Washington. Category IV wetlands have the lowest level of ecological functions and value, however may have potential to be enhanced. The Meydenbauer Park wetland was reported as having little potential for (EDAW, 2008-Exhibit E):

- Treating stormwater and toxins;
- Producing organic matter, native plant diversity/richness, and vegetative structure, and
- Supporting/providing aquatic, amphibious, and wetland associated wildlife habitat,

(2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans.

Yes, the project area is within the 200-feet shoreline buffer and a small segment of the sewer line will be placed in the Lake extending out less than 200 feet from the shoreline to connect to the existing sewer line. in the shallow swimming area adjacent to the park dock. (See Exhibit C/Sheet 3B)

The Project will cross one wetland (Class IV) has described in 3.Water a. Surface (1) and Exhibit D wetland report. The impact will be under a quarter acre for the wetlands and temporary in nature, as all three wetlands are to be removed in the Meydenbauer Bay Land Use Plan with on-site restoration or mitigation within the park. This is illustrated in Exhibit F-Central Portion Meydenbauer Bay Park Master Plan.

(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

There is limited excavation and fill where the sewer line extends through the wetland and buffer area. The project includes trenching through 550 square feet of class IV wetlands and approximately 250 square feet of trenching in the lake (100' times a 2.5' trench width. There will be de-watering between the end of the north dock and the shoreline to allow for placement of the sewer line in-water. It is not anticipated that there will be dredging required for this small in-water work activity.

(4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

There will be de-watering between the end of the north dock and the shoreline to allow for placement of the sewer line in-water. De-watering is anticipated around the boring pits to the north and south of the residential properties. The de-watering for boring the new sanitary sewer line under the residential structures and discharging it into Lake Washington. This activity will be limited in time and duration. The necessary dewatering operations for connecting the existing sewer line in the lake to the new on shore sanitary sewer and the de-watering related to the pipe boring will comply with applicable local permits, project-specific permits, and regulations.

A dewatering plan will be submitted as part of the CSWPPP, detailing the location of dewatering activities and equipment, as well as discharge point(s), in order to support the work to connect to the existing sewer line in the lake and to bore under the existing residences.

The dewatering zone will be established through a temporary cellular cofferdam to avoid the use of vibratory or pile driving equipment that may impact fish species and potentially damage the existing asbestos cement sewer pipeline. The cellular cofferdam will be floated into place and the contractor will isolate the area around the existing pipe to allow for the dewatering and access to the connection point. The cellular cofferdam will be water filled and the lower portion of the cell will be matched with the contours of Lake Washington. Rock ballast, sand bags and/or external braces may be utilized to decrease seepage and stabilize the structure. The specific cofferdam system will be determined by the contractor and approved by the City and will be designed with appropriate resistance to lateral forces and overturning.

To accommodate the sediment and gravel, most likely a mobile technology such as a dewater tank, weir tank, or sand media filter will be utilized on-site temporarily. All discharged clean water will be regulated under the water quality standards in the NPDES and applicable state or federal agencies. The dewatering process and details will be determined by the contractor and approved by the City.

(5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No, the proposal does not lie within a 100-year floodplain. (Confirmed via the FEMA Map No. 53033C0652K; Panel 652-51700 12005 – Zone X – Outside of Flood Plain)

(6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

There are not proposed discharges to the surface waters of Lake Washington or wetlands.

b. Ground

(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

Yes groundwater will be withdrawn and will be discharged to Lake Washington as part of the boring under existing residential structures. Any sediment that collects in the actual boring pits will be treated using a Baker tank type technology and will either be discharged to the sanitary sewer under a permit from King County or will be transported off site for proper disposal.

(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material is anticipated to be discharged into the ground. The Project's objective is to prevent potential catastrophic failure of the sanitary sewer line in the lake and to allow greater access to the sewer line system for the City of Bellevue Utilities department maintenance team.

c. Water Runoff (Including storm water)

(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

No proposed changes in runoff, present conditions are lawn with sheet flow runoff and parking lot with an existing system of catch basin/water quality elements. With implementation of a TESC Plan and standard BMPs, there is no anticipated polluted runoff from the project action.

(2) Could waste materials enter ground or surface waters? If so, generally describe.

None are anticipated

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

With implementation of a TESC Plan and standard BMPs there is no anticipated polluted runoff from the project action.

4. Plants

a. Check or circle types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Lawn area will be removed during trenching and replaced to pre-construction conditions. There are two potential significant trees or grouping of trees, just north of 99th Ave NE that will be impacted by the construction (See Exhibit C/Sheet 3B) and two trees will be added to the park as mitigation of their removal. Additionally, some ornamental gravel along the beach area will be removed, grid located and replaced. Gravel from the lake will be cataloged as to its grid locations, inventoried, stored temporarily and returned to the same gridded area on the lake bottom. Supplemental gravel, approved by WDFW on gravel size, will be added to in-water work area only as needed.

c. List threatened or endangered species known to be on or near the site.

No known threatened or endangered species are on the upland site. In water, species are Chinook salmon, steelhead trout, and bullhead trout populations in Lake Washington.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Standard landscaping in lawn area lawn will be replaced, pursuant to City of Bellevue Parks Department requirements.

5. ANIMALS

a. Check or circle any birds and animals which have been observed on or near the site or are known

to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other:

Mammals: deer, bear, elk, beaver, other:

Fish: bass, salmon, trout, herring, shellfish, other: *Specific Species Chinook Salmon, Steelhead Trout and Bullhead Trout*

b. List any threatened or endangered species known to be on or near the site.

The only know threatened and endangered species are the fish listed above and addressed in the Biological Evaluation that is required for the US Army Corp permit.

c. Is the site part of a migration route? If so, explain.

None known presently

d. Proposed measures to preserve or enhance wildlife, if any:

None proposed for upland area, due to absence of threatened or endangered species. For in-water work, construction associated with installing the proposed sewer line section will cause temporary and localized impacts to water quality (i.e., turbidity), with some de-water activities. With the work being limited to approved Washington Department of Fish & Wildlife Fish work windows, no long-term impacts are anticipated.

The trench that is constructed to connect the existing off shore sanitary sewer line to the new on shore sanitary sewer line will be covered with 2" minus round river rock to enhance use by Sockeye Salmon for near shore spawning purposes.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

Electricity for the pump stations will be the primary source of energy for the completed project.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

Pump station will use modern efficient electric pump and controllers to reduce runtime.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

None. The project is designed and located to reduce the potential for spills into Lake Washington by removing the sanitary sewer line from the lake and replacing the aging and fragile existing pipe.

(1) Describe special emergency services that might be required.

Standard emergency response by Fire or Police services in the event of an accident. Emergency services are not anticipated to be required with the completed project and risk of sanitary sewer line failure corrected.

(2) Proposed measures to reduce or control environmental health hazards, if any.

Coordination and notification to adjacent property owners, parks department and Marina during construction activities. Standard construction BMPs will be implemented to prevent any sewer spills during connection construction activities.

b. Noise

(1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?

No known noise that will adversely affect project.

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

There will be short-term construction vehicle noise, during daylight hours and as controlled by the City of Bellevue noise ordinance and allowable work hours.

(3) Proposed measures to reduce or control noise impacts, if any:

Implementations of standard construction BMP's and confirm contractor vehicles have regulation muffler systems and limit construction to day-light hours.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Park and Marina are the current use of the site. There is single family and multi-family housing the east and north of the project area.

b. Has the site been used for agriculture? If so, describe.

No

c. Describe any structures on the site.

There are buildings and parking lots associated with the Marina (southern portion) of the project action. The park side of the project action area is lawn, sidewalk, picnic tables, restroom facility, and dock on the northern portion.

d. Will any structures be demolished? If so, what?

No structure will be demolished under this project action.

e. What is the current zoning classification of the site?

(See Exhibit G/Sheet 3A)
R-5; R-3.5: Single Family Residential

R-30: Multi-Family Residential
O: Office

f. What is the current comprehensive plan designation of the site?

DNTN-OB: Old Bellevue District
SF-M, SF-H: Single Family (Medium to High Density)
MF-H: Multi-Family (High Density)
O: Office

g. If applicable, what is the current shoreline master program designation of the site?

The current shoreline master program designation is "Shoreline Overlay District" (20.25E). It is considered an urban environment for a shoreline with Lake Washington as the body of water.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The portions of the project site at or below Ordinary High Water, OHW, and the area 25 feet landward of OHW designated as a critical area within the City of Belleuve code.
There are three (3) class IV wetlands in the middle of the park property. The palustrine wetland associated with the shoreline of the project area was categorized as a category IV wetland by EDAW staff in 2008 using the Washington State Wetland Rating System for Western Washington. Category IV wetlands have the lowest level of ecological functions and value. (Exhibit E_EDAW 2008)

I. Approximately how many people would reside or work in the completed project?

There will be none.

j. Approximately how many people would the completed project displace?

The project will not displace any people, citizens or workers.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Construction activity around sensitive areas will be conducted pursuant to City of Bellevue Code and applicable conditions of WDFW and US Army Corp permit approvals.

i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project is consistent and with the applicable City Comprehensive Plan Elements and Land Use Code.

Comprehensive Plan - The applicable comprehensive plan elements are the Utilities and Shoreline Management:

- Goal # 1 (Utilities Element): To promote and encourage the development and maintenance of all utilities at the appropriate levels of service to accommodate the City of Bellevue's projected growth.
- Goal # 2 (Utilities): to promote and encourage the provisions of reliable utility service in a way that balances the public's concerns about safety and health impacts of utility infrastructures, consumers' interest in paying no more than a fair and reasonable price for the utility's product,

Bellevue's natural environment and the impacts that utility infrastructures may have on it, and the community's desire that utility projects be aesthetically compatible with surrounding land uses.

- Goal #1 (Shoreline Mgmt. Element): To protect and enhance the natural and developed shoreline of the City.
- Goal #3 (Shoreline Mgmt. Element): To protect, preserve, and enhance the natural resources and amenities of the city's shorelines for use and enjoyment by present and future generations.

Land Use Code - the Land Use Code has a several sections that apply to the proposed project. These include:

Land Use Charts in LUC 20.10.440 – The replacement and operation of the sewer line is considered an element of the "local utility system," and is considered "permitted in both the R-3.5 and R-30 land use zoning districts.

Shoreline Overlay District in LUC 20.25E – The replacement of the sewer lake line requires a Shoreline Substantial Development Permit that must demonstrate compliance with the performance standards for Clearing and Grading contained in LUC 20.25E.080.B & U.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Construction is underground - not applicable

b. What views in the immediate vicinity would be altered or obstructed?

None

c. Proposed measures to reduce or control aesthetic impacts, if any:

None proposed, aside from restoration of landscape to pre-construction status

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

There will be no light or glare produced by the proposal.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

None anticipated as maintenance would be conducted during daylight hours and any emergency service call will have light directed down into sewer pipeline system underground.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light or glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The project action area is located within the City of Bellevue Meydenbauer Bay Park and Marina.

b. Would the proposed project displace any existing recreational uses? If so, describe.

There will be short-term disruption and construction activity in the park during non-peak season.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Construction activity, within future active park areas, will be limited to non-peak season.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None identified in the project action area. An assessment was conducted and consultation with Washington State Department of Archeology and Historic Preservation (DAHP) is currently ongoing.

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

None present or identified.

c. Proposed measures to reduce or control impacts, if any:

None proposed presently. However, if any inadvertent discovery of historic or archeological items during construction, activities will be stopped and cultural resource experts and State Historical Preservation Officer will be contacted for determination and action steps.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Meydenbauer Way; Bellevue Place SE and 99th Ave NE (See Exhibit B/Sheet 2A)

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No, the nearest bus lines are routes 249 and 550 on Bellevue Way & Main Street more than a mile away.

c. How many parking spaces would be completed project have? How many would the project eliminate?

None proposed or needed. No parking spaces will be eliminated because of the project. The site will only need to be accessed periodically for maintenance.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

There will be a maintenance access on the existing sidewalk portion of the park. Some modifications to the sidewalk e.g. some widening and replacement with a thicker concrete slab will be necessary to allow access by maintenance vehicles.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The southern portion of the project is within the City of Bellevue Marina parking lot and adjacent to the docks with boats.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Existing maintenance trips will not increase or decrease with the completed project. There may be short-term truck traffic in the marina area for removal of unsuitable excavated soils that cannot be reused as trench backfill on-site. The majority of the fill will be retained on-site and some excavated soil could be removed via barge. It is anticipated that there could be 10 to 15 trucks trips a day during the peak construction activity.

g. Proposed measures to reduce or control transportation impacts, if any:

None proposed presently

15. Public Services

a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

None anticipated

b. Proposed measures to reduce or control direct impacts on public services, if any.

None proposed

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, cable tv.

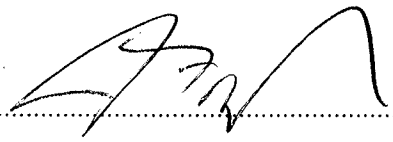
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.

The proposed pump station will need electrical power. The project design calls for electric power to be extended to the pump station in an underground conduit. The project will also include telephone and potentially fiber optic connections for the equipment monitoring telemetry. This will also be extended to the pump station location by underground conduit. There will be an above ground electrical junction box. The primary utilities proposed are a sewer line replacement with 10" PVC piping, pump station and vault.

The contractor will mobilize to the site and setup the construction staging area (proposed: Marina parking area) and temporary erosion and sedimentation control facilities along the project site. The upland gravity sewer pipe, force main pipe, manholes, service connections, and sewage pump station will be installed and put into service prior to any in-water work. The connection to the existing lake line within Meydenbauer Bay will be made during the approved in-water work window. The final stages of construction will include surface restoration, hydroseeding and Meydenbauer Bay restoration activities.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature.....  .....

Date Submitted.....12-13-12.....

Attachment 2
Plan Set

Exhibit A-3 – Plan Set Sewer Lake Line Replacement Project (Meydenbauer Bay)

CITY OF BELLEVUE
UTILITIES

SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)
C.I.P. S-58

MAYOR
CONRAD LEE

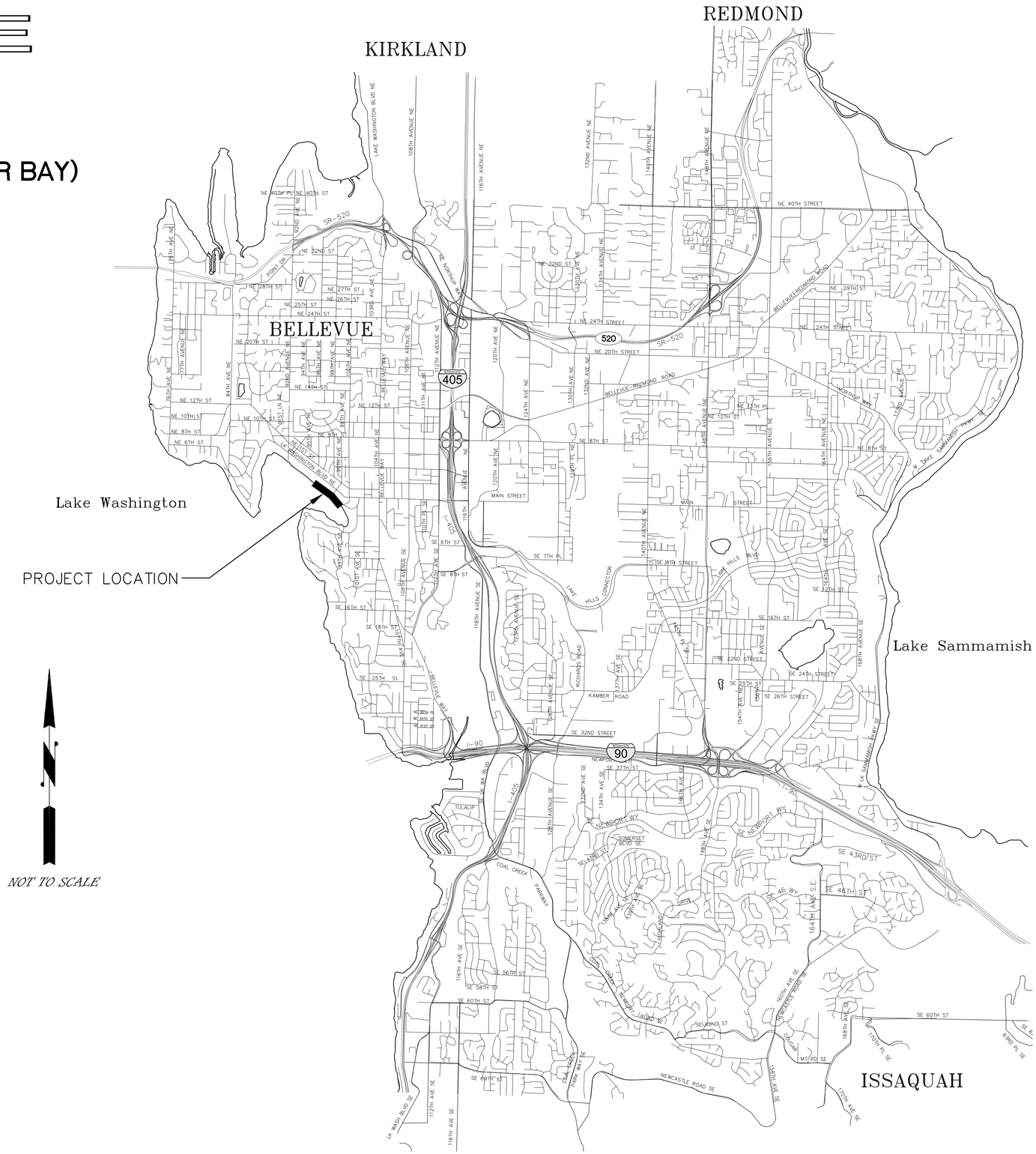
DEPUTY MAYOR
JENNIFER ROBERTSON

CITY MANAGER
STEVE SARKOZY

DIRECTOR OF UTILITIES
NAV OTAL

CITY COUNCIL
CLAUDIA BALDUCCI
JOHN CHELMINIAK
DON DAVIDSON
JOHN STOKES
KEVIN WALLACE

SHEET INDEX



NOT TO SCALE

CAROLINE E. BARLOW
STATE OF WASHINGTON
43461
REGISTERED
PROFESSIONAL ENGINEER

EXHIBIT A-3
SHORELINE SUBSTANTIAL DEVELOPMENT PLAN SET

File: H:\EVT_Projects\09\1088\CAD\PERMIT FIGURES\Figure A-3_COVER.dwg ID: hcm Date: 14-Dec-12 3:03:18pm

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2012 CITY OF BELLEVUE UTILITY ENGINEERING STANDARDS AND THE DEVELOPER EXTENSION AGREEMENT.

2. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE ENGINEER IF A CONFLICT EXISTS.

3. WRAP ALL DUCTILE IRON PIPE AND ADJACENT VALVES AND FITTINGS WITH 8-MIL. POLYETHYLENE CONFORMING TO AWWA C105.

4. ALL FITTINGS SHALL BE BLOCKED PER STANDARD DETAILS UNLESS OTHERWISE SPECIFIED.

5. LOT CORNERS MUST BE SET AND SIDE SEWER LOCATIONS VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

6. CALL 1-800-424-5555, OR 811, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.

7. ALL NEW MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48" AND SHALL CONFORM TO THE STANDARD DETAILS.

8. MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE WITH CHAPTER 296-809 WAC.

9. WORKERS MUST FOLLOW CONFINED SPACE REGULATIONS AND PROCEDURES WHEN ENTERING OR DOING WORK IN COB OWNED CONFINED SPACES. COMPLETED PERMIT MUST BE GIVEN TO THE UTILITIES INSPECTOR PRIOR TO ENTRY.

10. WHERE NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. ALTERNATIVELY, WHERE DIRECTED BY THE ENGINEER, THE TRENCH SHALL BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF, AKA FLOWABLE FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF THE AC MAIN.

11. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION BETWEEN ALL WATER AND SEWER LINES. ANY CONFLICTS SHALL BE REPORTED TO THE UTILITY AND THE ENGINEER PRIOR TO CONSTRUCTION.

12. WHERE WATERMAIN CROSSES ABOVE OR BELOW SANITARY SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED FOR MAXIMUM JOINT SEPARATION.

13. AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN THE CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR STRUCTURES SHALL BE 5 FEET.

14. WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND BELLEVUE UTILITIES IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND BELLEVUE UTILITIES WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF BELLEVUE UTILITIES. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE UTILITIES INSPECTOR PRIOR TO PERMIT SIGN-OFF.

15. THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC UTILITY EASEMENT(S) AFTER CONSTRUCTION TO A CONDITION EQUAL OR BETTER THAN CONDITION PRIOR TO ENTRY. THE CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

16. AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 TO 90 DEGREES.

17. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER. FLUSHING OF STREETS, PARKING LOTS AND SIDEWALKS SHALL NOT BE PERMITTED WITHOUT PRIOR CITY APPROVAL.

18. BEFORE COMMENCEMENT OF TRENCHING, THE CONTRACTOR SHALL PROVIDE FILTER FABRIC FOR ALL DOWNHILL STORM DRAIN INLETS AND CATCH BASINS THAT WILL RECEIVE RUNOFF FROM THE PROJECT SITE. THE CONTRACTOR SHALL PERIODICALLY INSPECT THE CONDITION OF ALL FILTER FABRIC AND REPLACE AS NECESSARY. FOR ALL CONSTRUCTION DURING THE RAINY SEASON, DOWNHILL BASINS AND INLETS MUST BE PROTECTED WITH CATCH BASIN INSERTS. SIMPLY PLACING FILTER FABRIC UNDER THE GRATE IS NOT ACCEPTABLE.

19. ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.

SANITARY SEWER NOTES:

1. SANITARY SEWER PIPE SHALL BE PVC CONFORMING TO ASTM D-3034 SDR 35 (4"-15") OR ASTM F-679 (18"-27"). BEDDING AND BACKFILL SHALL BE AS SHOWN IN THE STANDARD DETAILS.

2. WHERE SHOWN AS C900 PVC, THE SEWER PIPE SHALL HAVE DIMENSION RATIO (DR 18) AND CONFORM TO AWWA C900 OR AWWA C905.

3. ALL SIDE SEWERS SHALL BE 6" DIAMETER PIPE AT A MINIMUM 2% SLOPE, UNLESS OTHERWISE NOTED ON THE STANDARD DETAILS.

4. ALL SIDE SEWER STUBS SHALL BE CAPPED WITH A WATERTIGHT CAP AND GASKET. CAP LOCATION SHALL BE MARKED WITH A 2 X 4 STAKE, 12 FEET LONG, WITH ONE END BURIED AT DEPTH OF THE CAP INVERT AND EXTENDING AT LEAST 3 FEET VERTICALLY OUT OF THE GROUND. THE PORTION OF STAKE ABOVE GROUND SHALL BE PAINTED WHITE AND MARKED WITH THE WORD "SEWER" AND THE DEPTH FROM PIPE INVERT TO GROUND SURFACE. CONNECT PIPE TO STAKE WITH AN 8-GAUGE WIRE AT OR ABOVE FINISHED GROUND LEVEL.

5. ALL TRENCHES SHALL BE COMPACTED, AND ASPHALT TREATED BASE IN PLACE IN PAVED AREAS, PRIOR TO TESTING SEWER LINES FOR ACCEPTANCE.

6. SIDE SEWER SHALL BE TESTED FOR ACCEPTANCE AT THE SAME TIME THE MAIN SEWER IS TESTED.

7. TOPS OF MANHOLES WITHIN PUBLIC RIGHTS-OF-WAY SHALL NOT BE ADJUSTED TO FINAL GRADE UNTIL JUST PRIOR TO PAVING.

8. ALL MANHOLES IN UNPAVED AREAS SHALL INCLUDE A CONCRETE SEAL AROUND ADJUSTING RINGS PER STANDARD DETAIL.

9. CONTRACTOR SHALL ADJUST ALL MANHOLE RIMS TO FLUSH WITH FINAL FINISHED GRADES, UNLESS OTHERWISE SHOWN.

10. ALL SEWER MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE "STAKED" BY A SURVEYOR LICENSED IN WASHINGTON STATE FOR "LINE AND GRADE" AND CUT SHEETS PROVIDED TO THE ENGINEER, PRIOR TO STARTING CONSTRUCTION.

11. CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES, SCREENS OR PLUGS TO PREVENT FOREIGN MATERIALS FROM ENTERING EXISTING SANITARY SEWER SYSTEM. SCREENS OR PLUGS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AND SHALL BE REMOVED ALONG WITH COLLECTED DEBRIS AT THE TIME OF FINAL INSPECTION AND IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.

12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT NO CONFLICTS EXIST BETWEEN SANITARY SEWER LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.

13. MINIMUM COVER OVER SEWER PIPE SHALL BE FIVE FEET, UNLESS OTHERWISE SHOWN.

14. SIDE SEWER DEMOLITION SHALL BE PERFORMED PRIOR TO REMOVAL OF BUILDING FOUNDATION. THE SIDE SEWER FOR EACH BUILDING SHALL BE EXCAVATED AND REMOVED FROM THE HOUSE CONNECTION TO THE EDGE OF THE PUBLIC RIGHT-OF-WAY, OR PROPERTY LINE. THE CONTRACTOR SHALL CAP THE END OF THE SIDE SEWER TO REMAIN IN PLACE. SIDE SEWER DEMOLITION SHALL BE PERFORMED IN THE PRESENCE OF THE CITY OF BELLEVUE SEWER MAINTENANCE ENGINEERING TECHNICIAN.

15. THE CONTRACTOR SHALL PROVIDE A VIDEOTAPE (DVD OR VHS FORMAT, STANDARD MODE) OF THE SEWER PIPE INTERIOR FOR THE CITY'S REVIEW. THE VIDEO SHALL PROVIDE A MINIMUM OF 14 LINES PER MILLIMETER RESOLUTION AND COVER THE ENTIRE LENGTH OF THE APPLICABLE PIPE. THE CAMERA SHALL BE MOVED THROUGH THE PIPE AT A UNIFORM RATE (≤30 FT/MIN), STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION. THE VIDEO SHALL BE TAKEN AFTER INSTALLATION AND CLEANING TO INSURE THAT NO DEFECTS EXIST. THE PROJECT WILL NOT BE ACCEPTED UNTIL ALL DEFECTS HAVE BEEN REPAIRED.

WATER NOTES:

1. ALL PIPE SHALL BE DUCTILE IRON CLASS 52 UNLESS OTHERWISE SHOWN.

2. ALL PIPE AND FITTINGS NOT TO BE DISINFECTED IN PLACE SHALL BE SWABBED WITH 1% AVAILABLE CHLORINE SOLUTION PRIOR TO INSTALLATION.

3. THE NEW WATERMAIN SHALL BE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER NEW MAIN IS PRESSURE TESTED, FLUSHED, DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED AND RECEIVED BY THE CITY INSPECTOR. SEE STANDARD DETAIL W-9.

4. AFTER DISINFECTING THE WATERMAIN, DISPOSE OF CHLORINATED WATER BY DISCHARGING TO THE NEAREST OPERATING SANITARY SEWER.

5. WATERMAIN SHUT-OFF SHALL BE COORDINATED WITH THE WATER OPERATIONS DIVISION FOR PREFERRED TIMING DURING FLOW CONTROL CONDITIONS. WATERMAIN SHUT-OFFS SHALL NOT BE SCHEDULED TO TAKE PLACE ON FRIDAYS, OR ON THE FIVE DAYS BEFORE NOR ONE DAY AFTER A CITY HOLIDAY, UNLESS OTHERWISE APPROVED BY THE UTILITY.

6. DEFLECT THE WATERMAIN ABOVE OR BELOW EXISTING UTILITIES AS REQUIRED TO MAINTAIN 3 FT. MINIMUM COVER AND 12 INCH MINIMUM VERTICAL CLEARANCE BETWEEN UTILITIES UNLESS OTHERWISE SPECIFIED.

7. THE WATERMAIN SHALL BE INSTALLED ONLY AFTER THE WALKWAY SUBGRADE IS BACKFILLED, GRADED AND COMPACTED IN CUT AND FILL AREAS.

8. ALL SERVICES SHALL BE 1" X 1" PER STANDARD DETAILS UNLESS OTHERWISE SPECIFIED. ADAPTORS FOR ¾" METERS SHALL BE USED WHERE APPLICABLE. WHEN WORKING WITH ASBESTOS CEMENT PIPE, THE CONTRACTOR IS REQUIRED TO MAINTAIN WORKERS' EXPOSURE TO ASBESTOS MATERIAL AT OR BELOW THE LIMIT PRESCRIBED IN WAC 296-62-07705.

811 Know what's below. Call before you dig.

DRAFT

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NO	DATE	BY	APPR	REVISIONS

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CAROLINE E. BARROW STATE OF WASHINGTON 43461 REGISTERED PROFESSIONAL ENGINEER

Approved By

UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

SMR	12/10/12
DESIGNED BY	DATE
HCM	12/10/12
DRAWN BY	DATE
ALC	12/10/12
CHECKED BY	DATE

CITY OF BELLEVUE WASHINGTON

City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

GENERAL NOTES

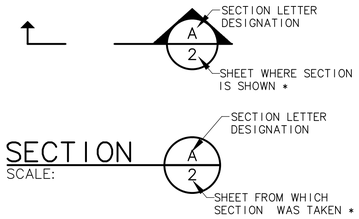
SEC 31 TWP 25 RGE 5 SHT 2 OF

LEGEND

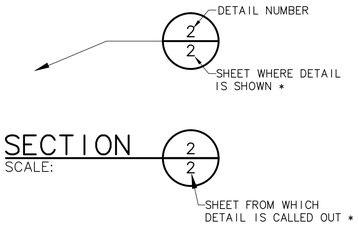
	EXISTING	PROPOSED
SANITARY SEWER	SS	8"SS
STORM DRAIN	SD	36"SD
ABANDON	(ABAND)	
WATERLINE	W	1"W
UNDERGROUND POWER	UG PWR	
FIBER OPTIC	FO	
GAS	G	
TELEPHONE	TEL	
CULVERT		
RIGHT-OF-WAY/ PROPERTY LINE	R/W	
CENTER LINE		
STAGING AREA		
FENCE		
RETAINING WALL		
ROCK WALL		
HEDGE		
EDGE OF ROAD		
CURB		
SIDEWALK		
DITCH		
MAJOR CONTOUR	180	180
MINOR CONTOUR	181	181
MANHOLE		
CATCH BASIN		
YARD DRAIN		
OVERFLOW DRAIN		
VALVE		
FIRE HYDRANT ASSEMBLY		
WATER METER		
CAP/PLUG		
HOSE BIBB		
FITTING		
UTILITY POLE		
GUY WIRE		
LIGHT POST		
UTILITY VAULT		
PULL BOX		
MAIL BOX		
SIGN		
TREE DECIDUOUS		
TREE CONIFEROUS		
TREE TO BE REMOVED		

SECTION AND DETAIL DESIGNATIONS

SECTION DESIGNATIONS



DETAIL DESIGNATIONS



* NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED WITH A DASH.

ABBREVIATIONS

ABAND	ABANDONED
AC	ASPHALTIC CONCRETE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BLDG	BUILDING
BTM	BOTTOM
C	CENTERLINE
CB	CATCH BASIN
CDF	CONTROLLED DENSITY FILL
CL	CLASS
CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
COORD	COORDINATE
CONC	CONCRETE
CY	CUBIC YARD
DET	DETAIL
DI	DUCTILE IRON
DIA	DIAMETER
DR	DRIVEWAY
DWG	DRAWING
E	EAST
EA	EACH
EL	ELEVATION
EQ	EQUAL
ESC	EROSION AND SEDIMENT CONTROL
EX	EXISTING
EXIST	EXISTING
FM	FORCE MAIN
FT	FEET
G	GAS
GALV	GALVANIZED
GEN	GENERAL
HORIZ	HORIZONTAL(LY)
IE	INVERT ELEVATION
INSTL	INSTALL
INV	INVERT
L	LENGTH
LF	LINEAR FOOT
LT	LEFT
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PL	PLASTIC
PVC	POLYVINYL CHLORIDE
PWR	POWER
RT	RIGHT
R/W	RIGHT OF WAY
S	SOUTH
SCHED	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SERV	SERVICE
SHT(S)	SHEET(S)
SL	SLOPE
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
STL	STEEL
S/W	SIDEWALK
T, TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
VERT	VERTICAL(LY)
UGP	UNDERGROUND POWER LINE
W	WATER, WEST
WSDOT	WASHINGTON DEPARTMENT OF TRANSPORTATION

DRAFT

NO	DATE	BY	APPR	REVISIONS

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CITY OF BELLEVUE WASHINGTON

City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

SYMBOLS, LEGEND AND ABBREVIATIONS

SEC 31 TWP 25 RGE 5 | SHT 3 OF

LAKE WASHINGTON BLVD NE

99TH AVE NE

100TH AVE NE

MAIN ST

BELLEVUE PL SE

MEYDENBAUER WY

SHEET 9

SEE NOTE 2

SEE NOTE 1

10"SS PVC

4"SS FM

10"SS

10"FM

6"SS PVC

6"W

25' SHORELINE CRITICAL AREA BOUNDARY BUFFER, TYP

SHEET 5

SHEET 6

SHEET 7

MEYDENBAUER BAY

N

SCALE

50 25 0 50 100

SCALE IN FEET

DATUM BENCHMARK

NOTES:

1. SHOWN SHORELINE IS THE APPROXIMATE OHWM (18.59') BASED ON THE DECEMBER 21, 2009 SURVEY.

2. WETLAND AS DELINEATED ON NOVEMBER 13, 2012.

PLAN

SCALE: 1"=50'

DRAFT

DRAINAGE MAP #_____

WATER GRID #_____

SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)

OVERALL PROJECT SITE PLAN

SEC 31 TWP 25 RGE 5 SHT 4 OF

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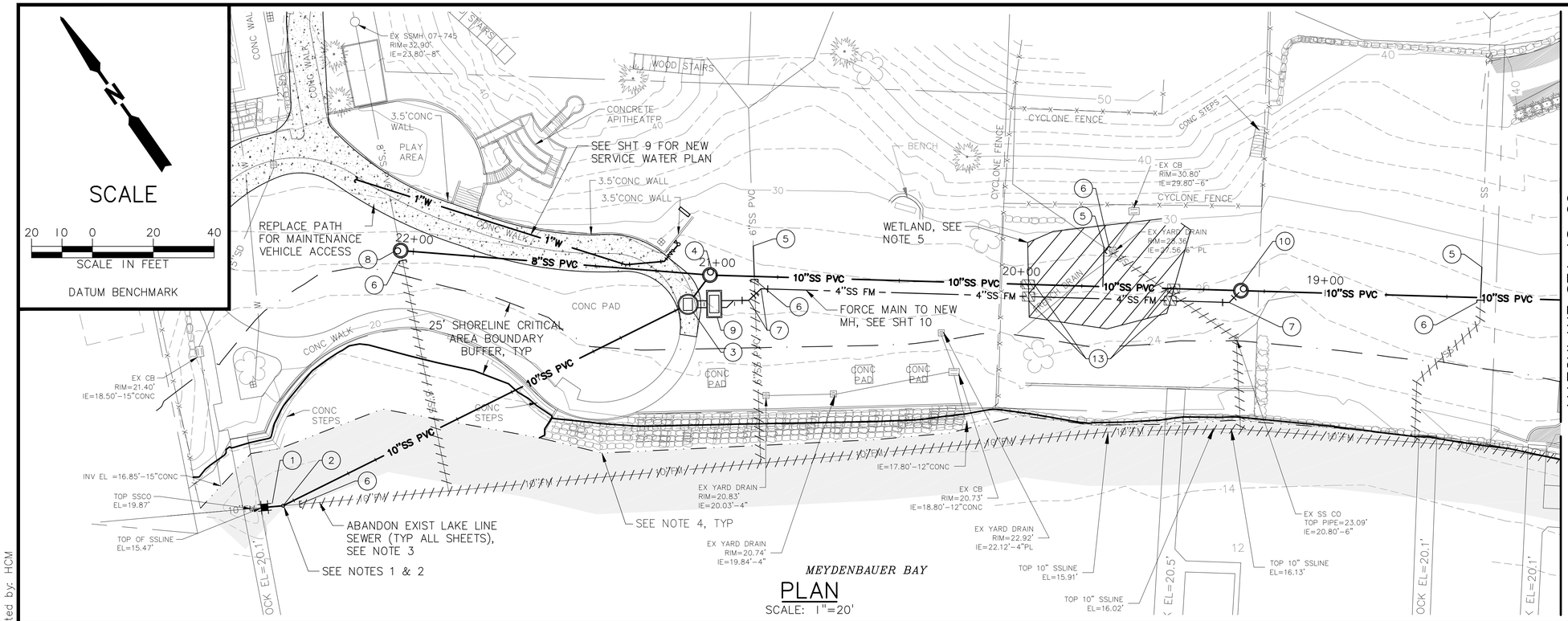
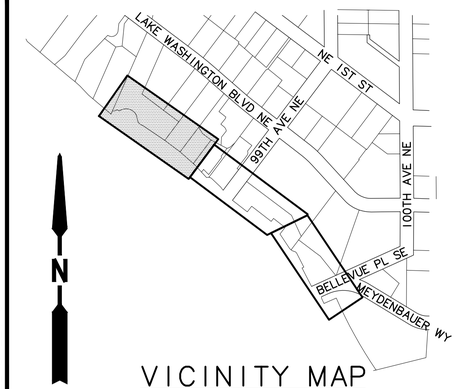


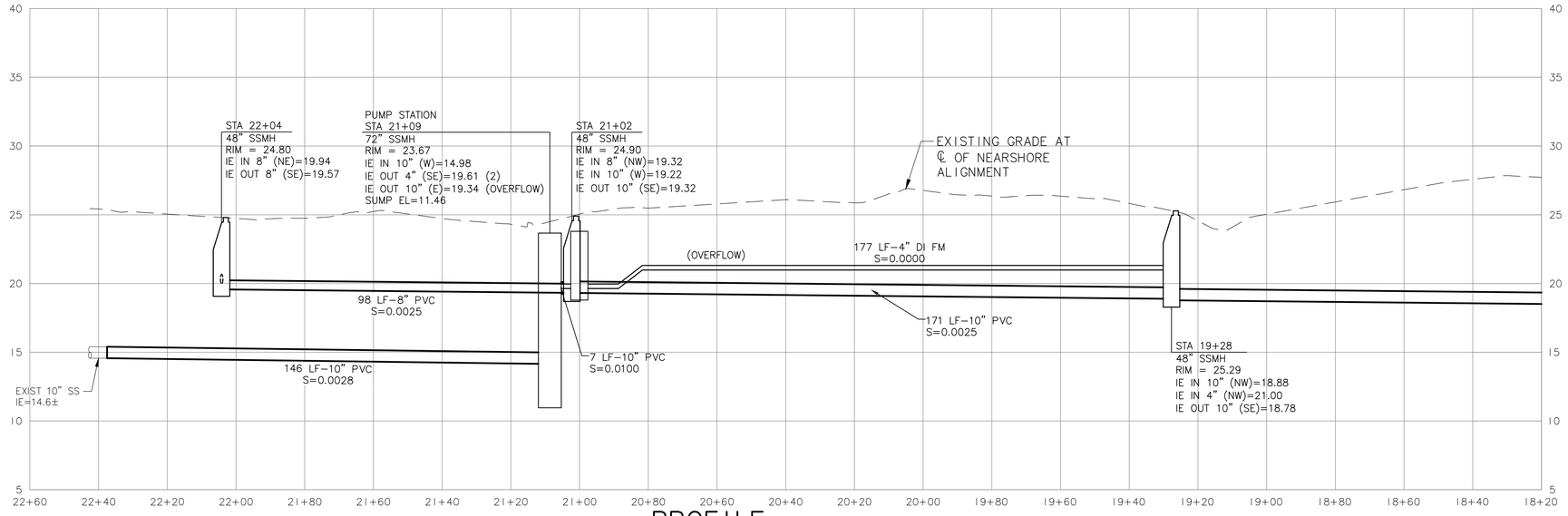
PLAN
SCALE: 1"=20'



VICINITY MAP
SCALE: 1"=200'

KEYED NOTES:

1. 10" COUPLING
2. 10" 22½° ELBOW
3. SEWAGE PUMP STATION, SEE SHT 10
4. OVERFLOW MH, SEE SHT 10
5. REMOVE & REPLACE SS LINE CONNECTIONS TO MEET SEWER PROFILE
6. CAP ABANDONED SEWER LINE, SEE NOTE 3
7. 4" 45° DI BEND, MJ
8. MH BUILT OVER EXIST SS LINE
9. VALVE VAULT, SEE SHT 8
10. FORCE MAIN DISCHARGE MANHOLE
13. TRENCH CHECK DAM, SEE DET 1, SHT 8



PROFILE
SCALE: 1"=20' HORIZ, 1"=5' VERT

SHEET NOTES:

1. CONTRACTOR TO FIELD VERIFY INVERT AND MATERIAL OF EXISTING LAKE LINE TIE-IN.
2. ASBESTOS CONCRETE PIPE CUTTING, REMOVAL, AND CLEAN-UP WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. SEE SPECIFICATIONS.
3. ABANDONED SEWER LINES TO BE FILLED WITH CDF AND CAPPED. SEE SPECIFICATIONS.
4. SHOWN SHORELINE IS THE APPROXIMATE OHWM (18.59') BASED ON DECEMBER 21, 2009 SURVEY.
5. WETLAND AS DELINEATED ON NOVEMBER 13, 2012.

DRAFT

DRAINAGE MAP #_____
WATER GRID #_____
SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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CITY OF BELLEVUE WASHINGTON

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UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)

SEWER PLAN & PROFILE
STA 22+20 TO STA 18+20

SEC 31 TWP 25 RGE 5 | SHT 5 OF

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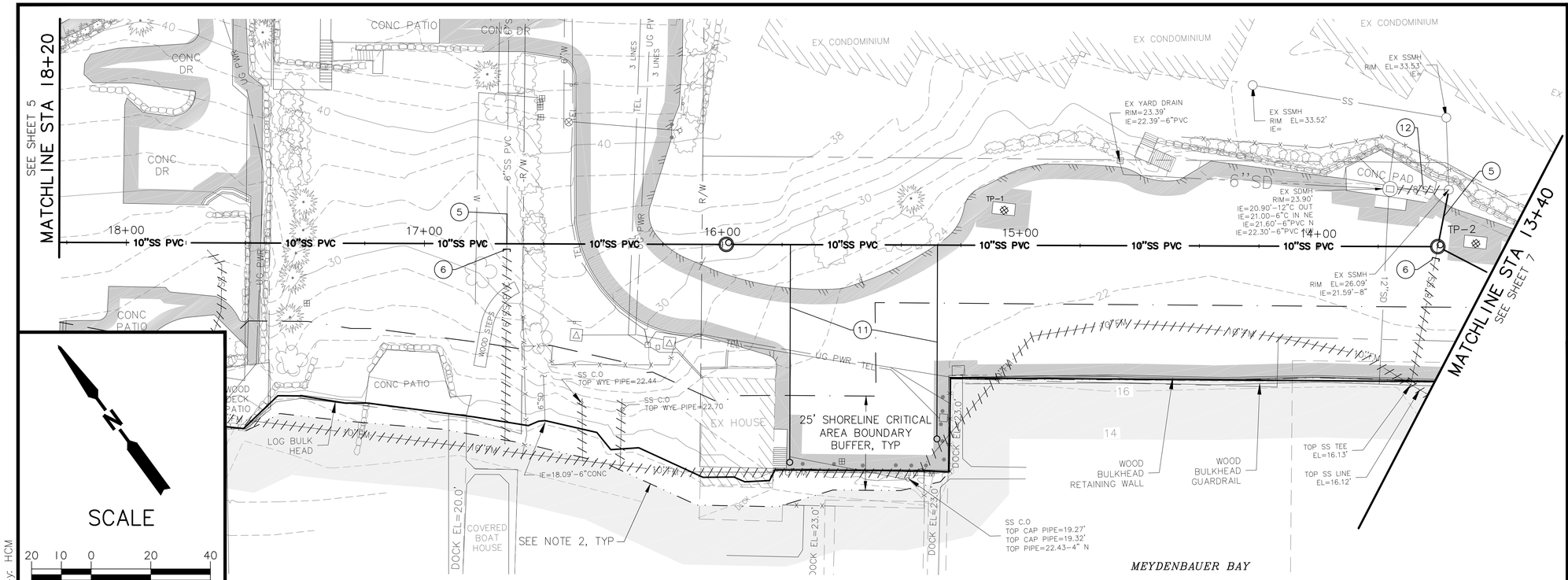
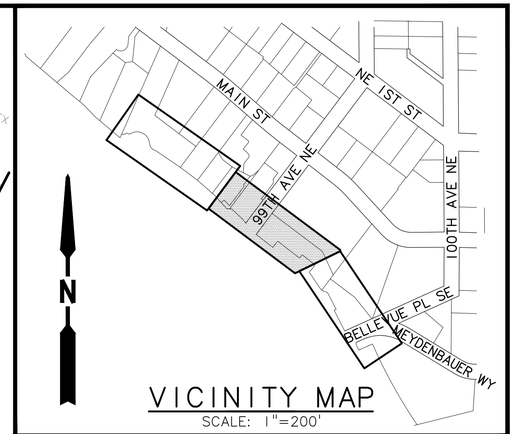


PLAN
SCALE: 1"=20'

DATUM BENCHMARK



VICINITY MAP
SCALE: 1"=200'

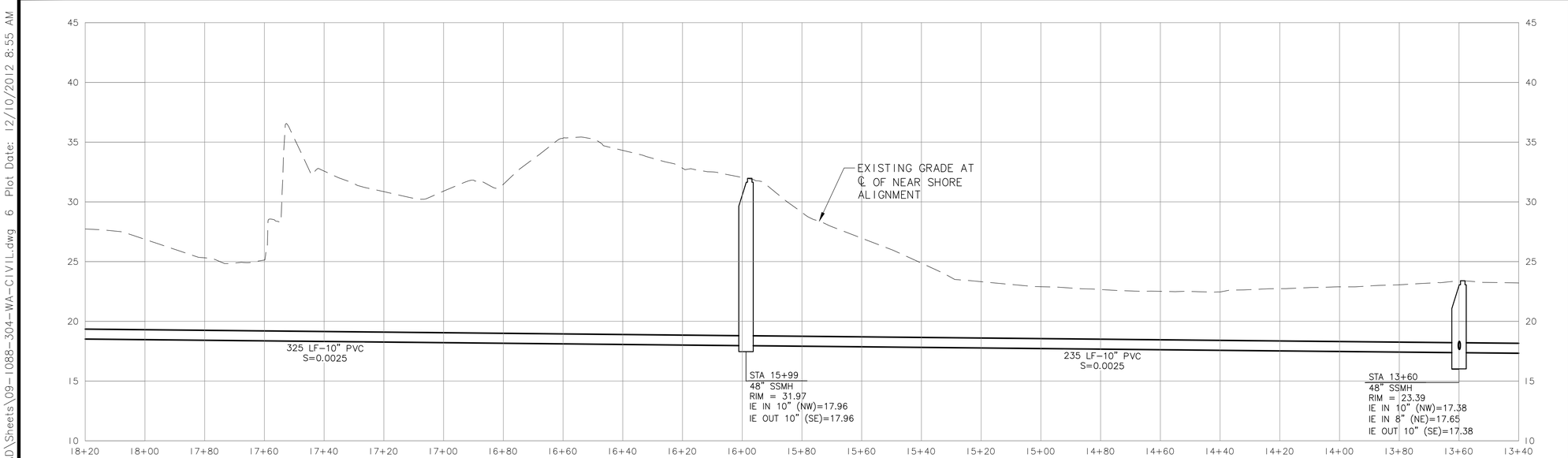
KEYED NOTES:

(5) REMOVE & REPLACE SS LINE CONNECTIONS TO MEET SEWER PROFILE

(6) CAP ABANDONED SEWER LINE, SEE NOTE 1

(11) PRESSURE SEWER LINE FOR RESIDENTIAL PUMP CONNECTIONS

(12) ABANDON OVERFLOW IN PLACE, SEE NOTE 1



PROFILE
SCALE: 1"=20' HORIZ, 1"=5' VERT

SHEET NOTES:

1. ABANDONED SEWER LINES TO BE FILLED WITH CDF AND CAPPED. SEE SPECIFICATIONS.

2. SHOWN SHORELINE IS THE APPROXIMATE OHWM (18.59') BASED ON DECEMBER 21, 2009 SURVEY.

DRAFT

DRAINAGE MAP #_____
WATER GRID #_____
SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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City of Bellevue
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SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)

SEWER PLAN & PROFILE
STA 18+20 TO STA 13+40

SEC 31 TWP 25 RGE 5 SHT 6 OF

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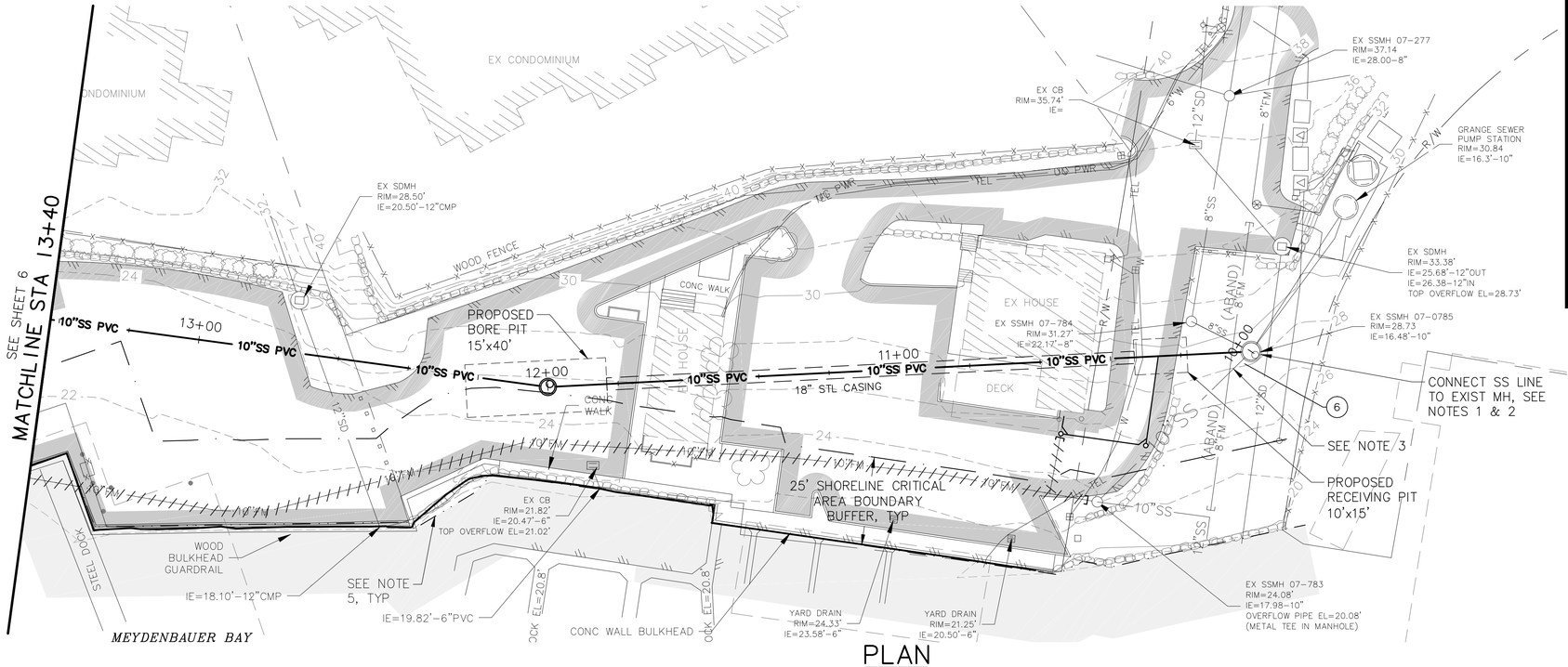

PLAN
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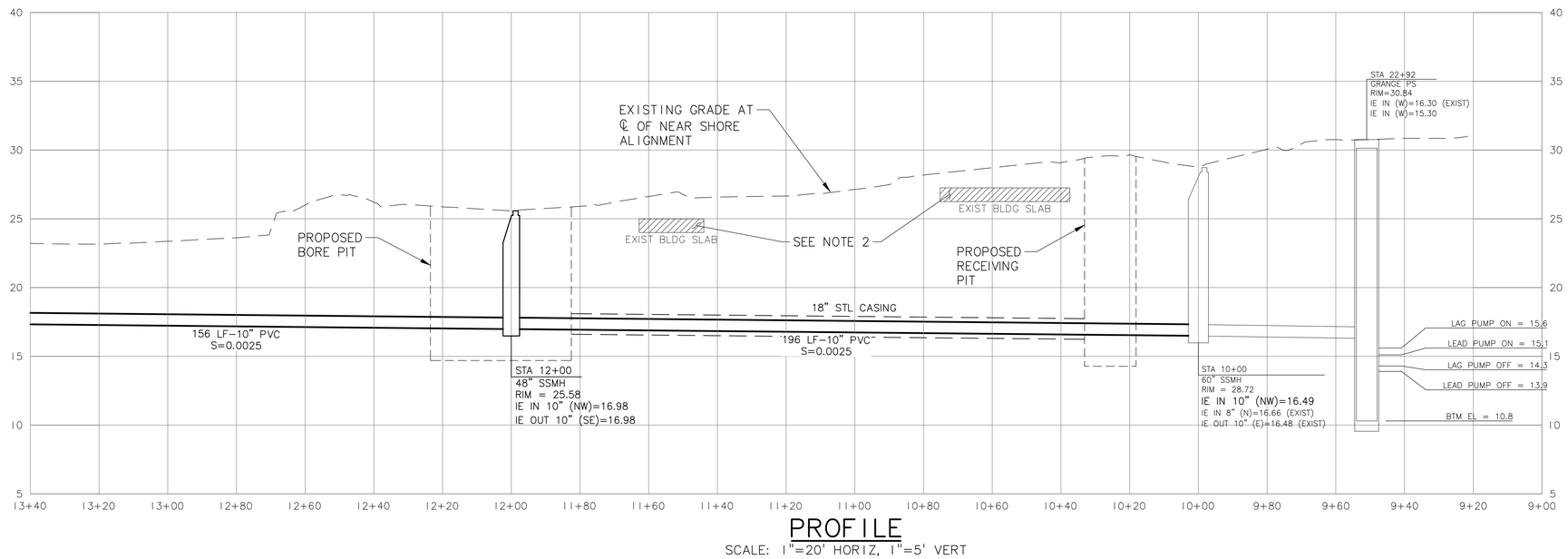
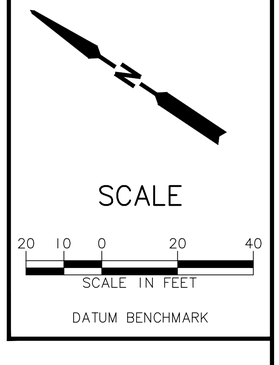
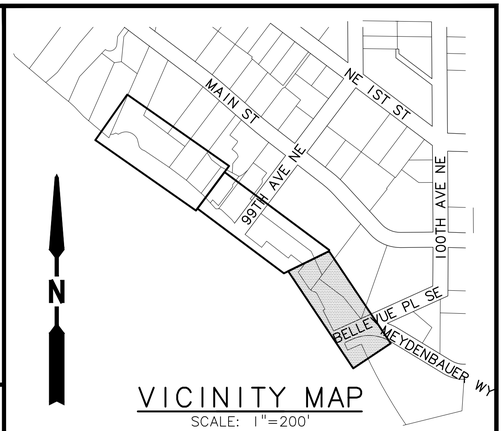


PROFILE
SCALE: 1"=20' HORIZ, 1"=5' VERT





VICINITY MAP
SCALE: 1"=200'

KEYED NOTES:

(6) CAP ABANDONED SEWER LINE, SEE NOTE 4

SHEET NOTES:

1. CORE DRILL 10" GRAVITY LINE CONNECTION IN EXISTING SANITARY MANHOLE. RE-GROUT CHANNEL FOR NEW CONNECTION. CAP EXISTING 10" SANITARY LINE AND GROUT 10" SANITARY PIPE PENETRATION.

2. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING FOUNDATIONS

3. ASBESTOS CONCRETE PIPE CUTTING, REMOVAL, AND CLEAN-UP WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. ABANDONED SEWER LINES TO BE FILLED WITH CDF AND CAPPED. SEE SPECIFICATIONS.

5. SHOWN SHORELINE IS THE APPROXIMATE OHWM (18.59') BASED ON DECEMBER 21, 2009 SURVEY.

DRAFT

DRAINAGE MAP #_____
WATER GRID #_____
SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

SMR 12/10/12 DESIGNED BY DATE
HCM 12/10/12 DRAWN BY DATE
ALC 12/10/12 CHECKED BY DATE

CITY OF BELLEVUE WASHINGTON

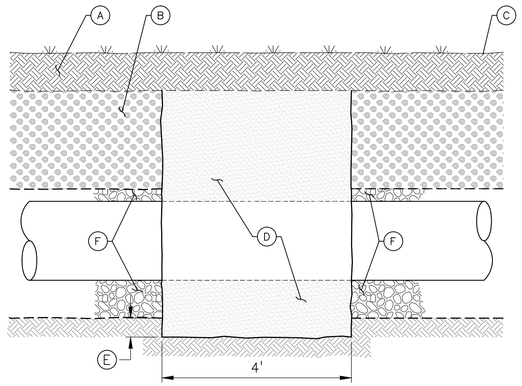
City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

SEWER PLAN & PROFILE
STA 13+40 TO STA 10+00

SEC 31 TWP 25 RGE 5 SHT 7 OF

H:\EVT_Projects\09\1088\CAD\Sheets\09-1088-304-WA-CIVIL.dwg 7 Plot Date: 12/10/2012 8:55 AM Plotted by: HCM



KEY NOTES

(A) 12" MIN DEPTH SOILS FROM WETLAND AREA OR WETLAND BUFFER

(B) TRENCH BACKFILL PER CITY STD DET S-14

(C) EXISTING GRADE TO BE MAINTAINED

(D) CLAY CHECK DAM

(E) EXTEND CLAY CHECK DAM 6" INTO ADJACENT NATIVE MATERIAL, EACH WAY

(F) PIPE ZONE BEDDING MATERIAL PER CITY STD DET S-15

NOTE:

1. CLAY USED FOR TRENCH CHECK DAM SHALL BE NATURALLY OCCURRING MATERIAL WITH A FINES CONTENT (<#200 SIEVE), NOT LESS THAN 50%.

TRENCH CHECK DAM

SCALE: 1/2"=1'-0"

1/5

DRAFT

NO	DATE	BY	APPR	REVISIONS

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CITY OF BELLEVUE WASHINGTON

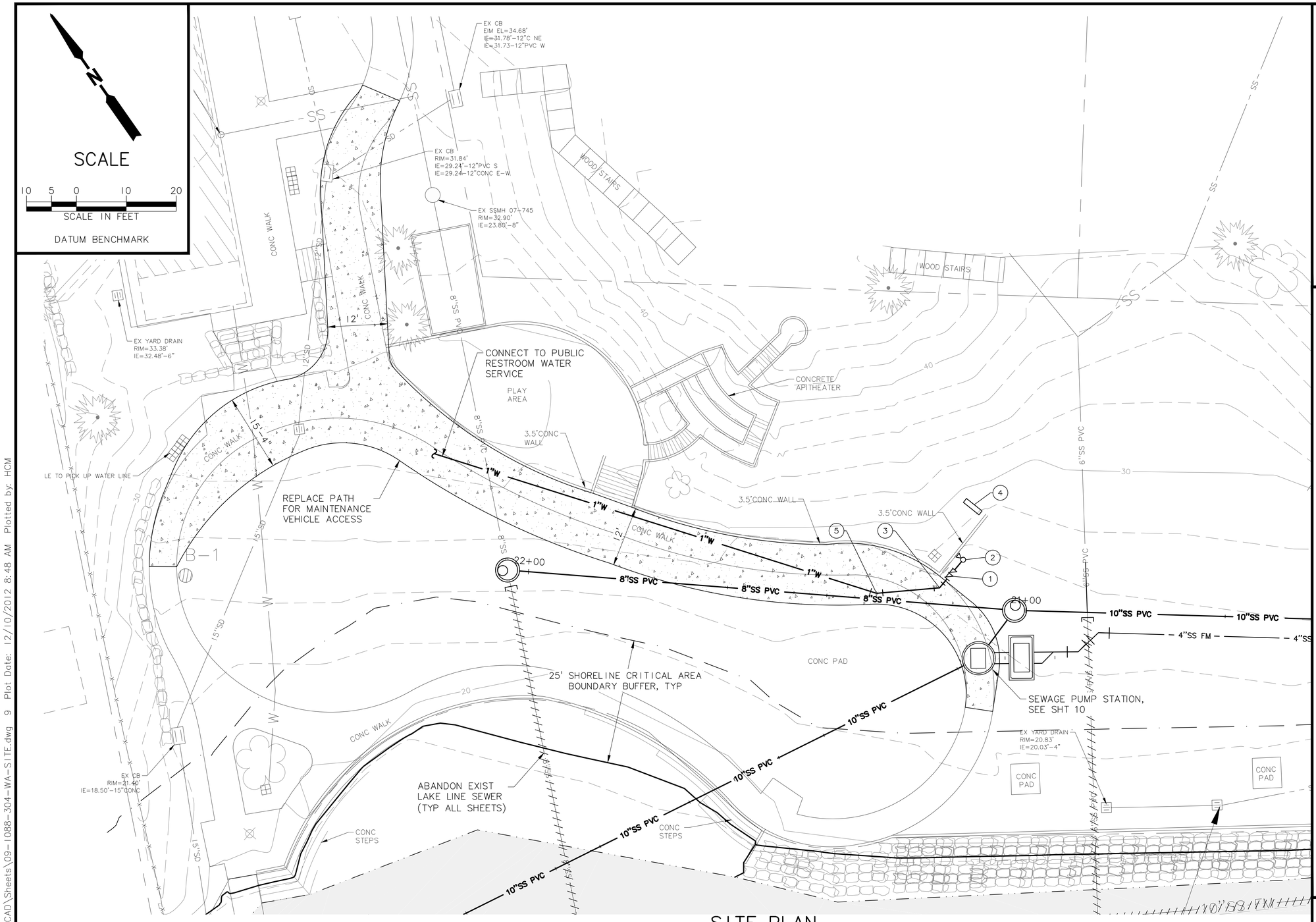
City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

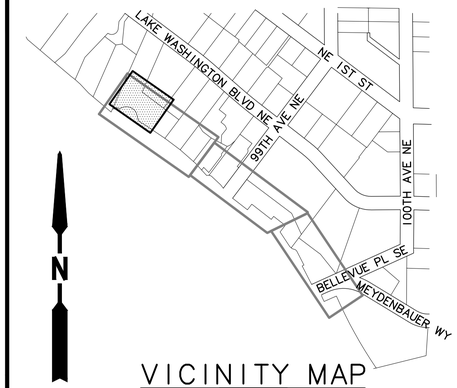
CIVIL DETAILS

SEC 31 TWP 25 RGE 5 | SHT 8 OF

H:\EVT_Projects\09\1088\CAD\Sheets\09-1088-304-WA-MECH.dwg 8 Plot Date: 12/10/2012 8:47 AM Plotted by: HCM



SITE PLAN
SCALE: 1"=10'



VICINITY MAP
SCALE: 1"=200'

KEYED NOTES:

1. BACKFLOW PREVENTION ASSEMBLY
2. HOSE BIBB
3. 1" 45° BEND, PVC
4. PUMP STATION CONTROL PANEL, SEE SHT E1
5. 1" 22½° BEND, PVC

DRAFT

DRAINAGE MAP #_____
WATER GRID #_____
SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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PROJECT MANAGER DATE

SMR 12/10/12 DESIGNED BY DATE
HCM 12/10/12 DRAWN BY DATE
ALC 12/10/12 CHECKED BY DATE

CITY OF BELLEVUE WASHINGTON

City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

LIFT STATION PLAN & DETAILS

SEC 31 TWP 25 RGE 5 SHT 9 OF

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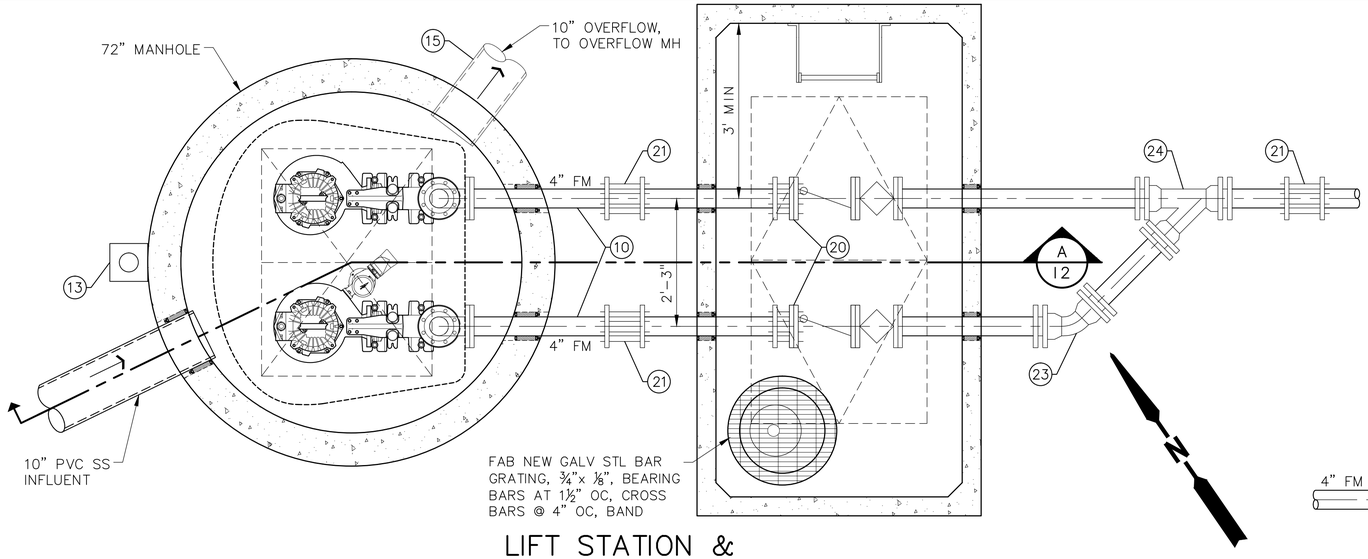
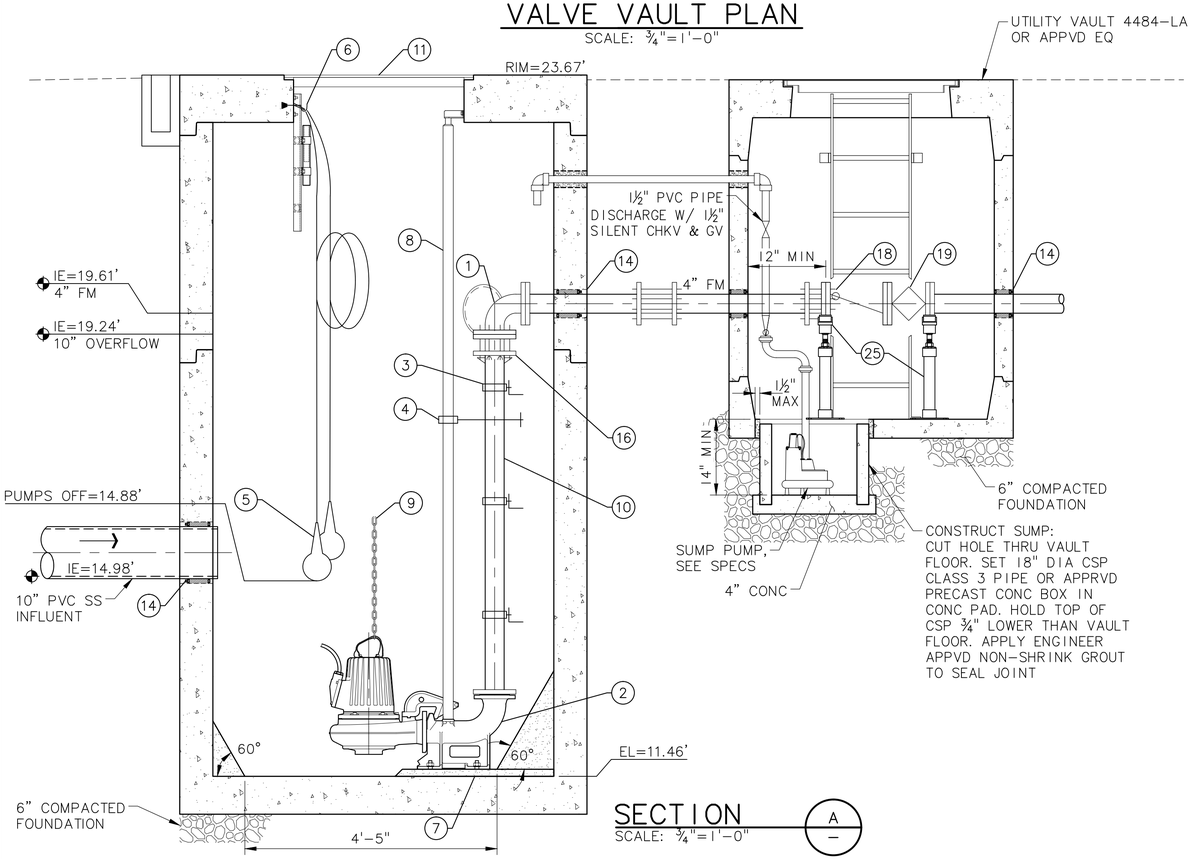


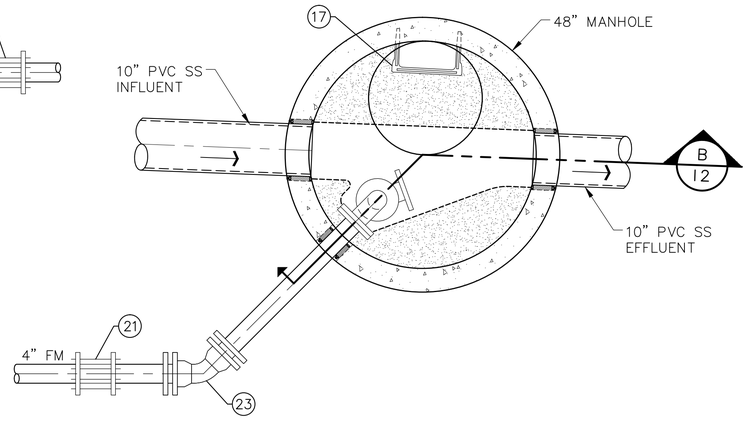
LIFT STATION & VALVE VAULT PLAN

SCALE: ¾"=1'-0"



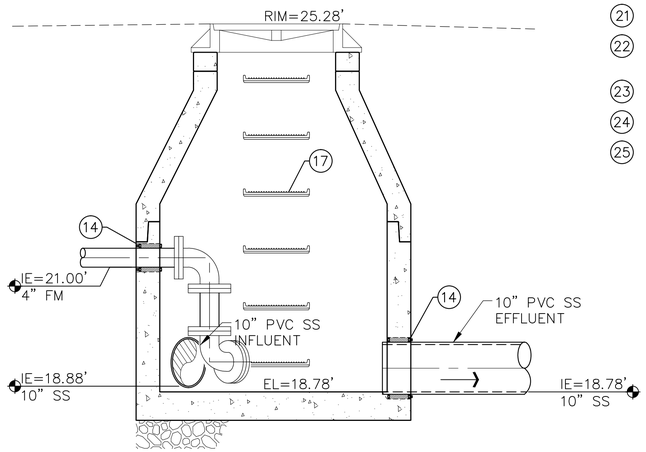
SECTION A

SCALE: ¾"=1'-0"



FORCE MAIN DISCHARGE MANHOLE PLAN

SCALE: ¾"=1'-0"



SECTION B

SCALE: ¾"=1'-0"

PIPING KEY NOTES:

1. 4"x4" 90° DI BEND, FLG (TYP OF 2)
2. 4" PUMP DISCHARGE ELBOW – CONNECT AS REQ'D BY PUMP MFR. ANCHOR TO BASE SLAB PER MFR'S RECOMMENDATIONS
3. PIPE SUPPORT, SPACE EVENLY
4. PIPE SUPPORT, FOLLOW MFR'S INSTALLATION INSTRUCTIONS
5. FLOAT
6. FLOAT HANGER ASSY
7. NON-SHRINK GROUT FOR LEVELING PUMPS PER MFR RECOMMENDATIONS
8. GUIDE RAILS – PROVIDE HORIZ/ VERT BRACKET SUPPORTS AS REQ'D BY PUMP MFR. SECURE TO INSIDE OF ACCESS HATCH AND WETWELL AS REQ'D BY PUMP MFR
9. SST LIFTING CHAIN (1 PER PUMP). ANCHOR TO TOP SLAB AS REQ'D BY PUMP MFR. SECURE TO INSIDE OF ACCESS HATCH AND WETWELL AS REQ'D BY PUMP MFR
10. 4" DI SPL, PE (TYP OF 2)
11. 48"x36" ACCESS HATCH PALL PROTECTION GRATING SYSTEM. AL DIAMOND PLATED W/ RECESSED PADLOCK CLIP. HATCHES SHALL OPEN AWAY FROM EACH OTHER.
12. 4" DI SPL, FLGXPE
13. DAVIT RECEIVING SLEEVE W/ COVER FOR PORTABLE HOIST SYSTEM
14. LINK-SEAL WALL PENETRATION
15. 10" DI SPL, PE
16. 4" MEGAFLANGE
17. MANHOLE LADDER W/ EXTENSION
18. 4" CHKV (TYP OF 2)
19. 4" PLUG VALVE (TYP OF 2)
20. 4" FCA (TYP OF 2)
21. 4" CPLG
22. 4" DI SPL, FLG, LENGTH AS REQ'D (TYP OF __)
23. 4" 45° DI BEND, MJ
24. 4"x4" 45° WYE, MJ
25. ADJUSTABLE PIPE SADDLE SUPPORT, (TYP OF 4)

DRAFT

NO	DATE	BY	APPR	REVISIONS

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UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

SMR	12/10/12
DESIGNED BY	DATE
HCM	12/10/12
DRAWN BY	DATE
ALC	12/10/12
CHECKED BY	DATE

CITY OF BELLEVUE WASHINGTON

City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)

LIFT STATION, OVERFLOW & FORCE MAIN DISCHARGE MANHOLE DETAILS

SEC 31 TWP 25 RGE 5 SHT 10 OF

H:\EVT_Projects\09\1088\CAD\Sheets\09-1088-304-WA-MECH.dwg 10 Plot Date: 12/10/2012 8:47 AM Plotted by: HCM

SYMBOL

SCHEMATIC	PLAN	DESCRIPTION
		GROUND ROD IN GROUND ROD BOX
		BATTERY.
	T	TRANSFORMER, PLAN VIEW SHOWN TO SCALE
3		CURRENT TRANSFORMER, NUMBER INDICATES NUMBER OF C.T.'S.
10	M	MOTOR, NUMBER INDICATES HORSEPOWER
G		GENERATOR WITH EXHAUST DUCTING
		MOTOR STARTER W/DISCONNECT
		PACKAGED POWER AND CONTROL PANEL
	60A	DISCONNECT SWITCH, NON FUSED (60A) INDICATES AMPERAGE RATING
100AF 200AS	F 200/100	DISCONNECT SWITCH, FUSED 200=SWITCH RATING, 100=FUSE RATING
M		UTILITY METERING
R	R	INDICATING LIGHT: A = AMBER G = GREEN B = BLUE R = RED W = WHITE
R	R	LIGHTED PUSHBUTTON WITH LENS COLOR ABOVE
HAND OFF AUTO	H O A	SELECTOR SWITCH: HOR = HAND/OFF/REMOTE HOA = HAND/OFF/AUTO RO = RUN/OFF
HOA	HS	HAND STATION
	LCP	LOCAL CONTROL PANEL
	PB	PUSHBUTTON SWITCH. MOMENTARY ON.
	PS	PRESSURE SWITCH. NORMALLY CLOSED.
	FS	FLOW SWITCH. NORMALLY CLOSED.
	ZS	LIMIT SWITCH, NORMALLY OPEN.
	LS	LEVEL SWITCH, CLOSES ON RISING LEVEL
	TS T	TS, TEMP. SWITCH, CLOSES ON FALLING TEMP. T, THERMOSTAT
CR		CONTROL RELAY
		POTENTIOMETER
LT	LT	LEVEL TRANSMITTER
PT	PT	PRESSURE TRANSMITTER
SI	SI	SPEED INDICATOR
FT	FT	FLOW TRANSMITTER
	S	SMOKE DETECTOR
	H	HEAT DETECTOR
	SV	SOLENOID VALVE.
150W	T	ELECTRIC HEATER
TDR	T	THERMOSTAT TIME DELAY RELAY TDOE = TIME DELAY ON ENERGIZATION TDOD = TIME DELAY ON DE-ENERGIZATION
	D	DOOR SECURITY SWITCH
VB	VB	VIBRATION SENSOR
LK	LK	LEAK DETECTION FOR SUBMERSIBLE PUMPS
	RTD	RESISTANCE TEMPERATURE DEVICE
	OT	OVER TEMPERATURE CUTOUT
	T	THERMOSTAT
		HORN
F		UNIT HEATER – SHOWING BLOWER DIRECTION

NOTE:

SYMBOLS AND ABBREVIATIONS ON THIS SHEET APPLY ONLY TO THE ELECTRICAL DRAWINGS.

SYMBOL	DESCRIPTION
a F1 2	FLUORESCENT LIGHTING FIXTURE, SURFACE. "F1" INDICATES TYPE PER FIXTURE SCHEDULE. "2" INDICATES CIRCUITING. "a" INDICATES SWITCHING.
	FLUORESCENT LIGHTING FIXTURE, RECESSED. ● INDICATES FIXTURE ON EMERGENCY CIRCUIT.
	FLUORESCENT WRAPAROUND FIXTURE. SURFACE SURFACE OR PENDANT AS INDICATED IN FIXTURE SCHEDULE.
XP	FLUORESCENT LIGHTING FIXTURE FOR HAZARDOUS AREAS. CLASS. AND DIV. AS INDICATED IN FIXTURE SCHEDULE
	FLUORESCENT STRIP, SURFACE OR PENDANT AS INDICATED IN FIXTURE SCHEDULE.
	INCANDESCENT, COMPACT FLUORESCENT, OR H.I.D. LIGHTING FIXTURE, CEILING MOUNTED.
	INCANDESCENT,COMPACT FLUORESCENT OR H.I.D. LIGHTING FIXTURE, WALL MOUNTED.
	INCANDESCENT, COMPACT FLUORESCENT, OR H.I.D. LIGHTING FIXTURE ON EMERGENCY CIRCUIT.
	EXIT LIGHT, INDICATES DIRECTION OF ARROW
	EMERGENCY WALL PACK.
	H.I.D. LIGHTING FIXTURE, POLE MOUNTED.
$	SINGLE POLE SWITCH
$2	DOUBLE POLE SWITCH
$3	THREE WAY SWITCH
$4	FOUR WAY SWITCH
$x	OTHER SWITCHES: P – WITH PILOT LIGHT K – KEY OPERATED M – MOTOR RATED SWITCH WP – WEATHER PROOF T – TIMER
PE	PHOTO ELECTRIC RELAY
TC	TIME CLOCK. VERIFY TYPE FROM PLANS.
LC	LIGHTING CONTACTOR.
J	CONDUIT JUNCTION BOX
F	MOTOR, NUMBER INDICATES H.P.
(X)	SURFACE METAL RACEWAY WITH RECEPTACLE AT X" O.C.
2 GFI	DUPLEX RECEPTACLE, 2 INDICATES CIRCUITING, GFI INDICATES GROUND FAULT CIRCUIT INTERRUPTION
	FOURLEX RECEPTACLES
	SINGLE RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE, AS NOTED
	DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPLASH.
	DATA OUTLET
IC	INTERCOM
	SPLIT TELEPNONE DATA OUTLET
	TELEPHONE OUTLET
	PANELBOARD – CONCEALED
	PANELBOARD SURFACE MOUNTED
HH	HANDHOLE WITH DESIGNATION P – POWER C – CONTROL S – SIGNAL MH – MAN HOLE V – VAULT
	ELECTRIC HEATER WALL OR BASEBOARD
PFR	PHASE FAIL RELAY & FUSE
RTM	RUN TIME METER
CNT	START COUNT METER
	BLOWN FUSE INDICATOR
	NORMALLY OPEN CONTACT. (WHEN DE-ENERGIZED)
	NORMALLY CLOSED CONTACT. (WHEN DE-ENERGIZED)
K	KIRK KEY INTERLOCK

SYMBOL	DESCRIPTION
	CONDUIT CONCEALED
	CONDUIT EXPOSED.
	CONDUIT REMOVED
E	EXISTING CONDUIT ROUTED UNDERGROUND.
	MANUFACTURERS CORD/CABLE
	CONDUIT WITH FLEX CONNECTION
	HEAT TAPE ON PIPING.
	CONDUIT TURNED UP OR TOWARD.
	CONDUIT TURNED DOWN OR AWAY.
	CONDUIT CAPPED.
A	CONDUIT SEALS. CLASS 1. DIV.1 EXPLOSION PROOF
A	PROVIDE CONDUIT SEALS PER NEC
L-7	CONDUIT HOME RUN Ø"C, 2#12 & 1#12 GND. TO PANEL L, CKT. 7 UNLESS SHOWN OTHERWISE.
C10	CONDUIT RUN – SEE CONDUIT SCHEDULE.
30 2	THERMAL MAGNETIC CIRCUIT BREAKER, RATING/NO. POLES MO – MAGNETIC ONLY
SA	SURGE ARRESTOR
	ATS – AUTOMATIC TRANSFER SWITCH MTS – MANUAL TRANSFER SWITCH
XKVAR	POWER CAPACITOR WITH KVAR RATING
MS 1	FULL VOLTAGE STARTER, NEMA SIZE 1 MS=MOTOR STARTER CONTACT BP=BYPASS CONTACTOR IC=ISOLATION CONTACTOR
	THERMAL OVERLOAD RELAY
VFD	VARIABLE FREQUENCY DRIVE
3	REDUCED VOLTAGE AUTO-TRANSFORMER STARTER NEMA SIZE 1
BP IC	SOLID STATE STARTER, REDUCED VOLTAGE WITH ISOLATION & BYPASS CONTACTORS
50A	FUSE WITH AMPERE RATING
AM AM AS	AM – AMMETER VM – VOLT METER AVM – AMMETER AND VOLT METER AS – AMMETER SWITCH PM – POWER MONITOR VS – VOLTMETER SWITCH
	CONDUCTORS NOT CONNECTED.
	CONDUCTORS CONNECTED.
	PULL OUT SWITCH/PLUG-RECEPTACLE CONNECTION
⊠	TERMINAL IN MCC
⊗	TERMINAL IN MCP
⊘	TERMINAL IN REMOTE DEVICE OR PANEL

ABBREVIATIONS

A,AMP	AMPERE
AC	AIR COMPRESSOR, ALTERNATING CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AI	ANALOG INPUT POINT (PLC)
AIC	AMPERES INTERRUPTING CAPACITY
AIL	AMBER INDICATING LIGHT
AL	ALARM
ALT	ALTERNATOR
AM	AMMETER
AO	ANALOG OUTPUT POINT (PLC)
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
BAT	BATTERY
BC	BATTERY CHARGER
BCP	BOTTOM CONTROL PANEL
BH	BLOCK HEATER
BIL	BLUE INDICATING LIGHT
BP	BYPASS CONTRACTOR
C	CONDUIT, CONTROL
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CNT	START COUNTER
CONT	CONTINUED
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CT	CURRENT TRANSFORMER
CV	CHECK VALVE
DB	DIRECT BURIED
DEM	DEMAND
DF	DEMAND FACTOR
DI	AC DIGITAL INPUT POINT (PLC)
DO	AC DIGITAL OUTPUT POINT (PLC)
DWG	DRAWING
E,EXIST	EXISTING
EF	EXHAUST FAN
F	FUSED
FACP	FIRE ALARM CONTROL PANEL
FE	FLOW ELEMENT
FIT	FLOW INDICATING TRANSMITTER
FS	FLOW SWITCH
FT	FLOW TRANSMITTER
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
G,GND	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GIL	GREEN INDICATING LIGHT
GRS	GALVANIZED RIGID STEEL (CONDUIT)
H	HOT, HIGH, HAND
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND OFF AUTO
HTR	HEATER
I	INTRUSION SWITCH
IC	ISOLATION CONTRACTOR
ISR	INTRINSICALLY SAFE RELAY
KI	KEY INTERLOCK
kVA	KILO VOLT AMPS
kVAR	KILO VOLT AMP REACTIVE
kVARH	KILOVAR HOUR
kW	KILOWATT
kWH	KILOWATT HOUR
L	LOW
LC	LIGHTING CONTACTOR
LCP	LOCAL CONTROL PANEL
LE	LEVEL ELEMENT
LIT	LEVEL INDICATING TRANSMITTER
LK	MOTOR LEAK DETECTOR
LS	LEVEL SWITCH
LSH	LEVEL SWITCH – HIGH
LSHA	LEVEL SWITCH – HIGH ALARM
LSL	LEVEL SWITCH – LOW
LSLA	LEVEL SWITCH – LOW ALARM
LT	LEVEL TRANSMITTER
LTG	LIGHTING
M	METER
MCC	MOTOR CONTROL CENTER
MCP	MAIN CONTROL PANEL
MCR	MASTER CONTROL RELAY
MFR	MANUFACTURER
MH	MANHOLE
MOV	MOTOR OPERATED VALVE
MS	MOTOR STARTER
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NC	NORMALLY CLOSED
NF	NON FUSED
NO	NORMALLY OPEN
OI	OPERATOR INTERFACE
OIT	OPERATOR INTERFACE TERMINAL
OHP	OVERHEAD POWER
OL	OVERLOAD RELAY
OT	OVER TEMP
P	POWER
P.S.	PUMP STATION
PB	PUSH BUTTON
PBL	PUSH BUTTON – LIGHTED
PE	PHOTO ELECTRIC RELAY
PFR	PHASE FAILURE RELAY
PIT	PRESSURE INDICATING TRANSMITTER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PMD	POWER MONITORING DEVICE
PNL	PANEL
POT	POTENTIOMETER
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLY VINYL CHLORIDE (CONDUIT)
PVC/C	PVC COVERED GALVANIZED RIGID STEEL CONDUIT
PX	PROXIMITY SWITCH
RCP	REMOTE CONTROL PANEL
RHP	RADIANT HEAT PANEL
RIL	RED INDICATING LIGHT
RO	RUN – OFF
RTD	RESISTANCE TEMPERATURE DEVICE
RTM	RUN TIME METER
RV	REDUCED VOLTAGE
RVAT	REDUCED VOLTAGE AUTO TRANSFORMER STARTER
S	SIGNAL
SA	SURGE ARRESTOR
SE	SERVICE ENTRANCE
SHT	SHEET
SMP	SUMP PUMP
SS	STAINLESS STEEL
SSS	SOLID STATE STARTER
SV	SOLENOID VALVE
T	THERMOSTAT, TRANSFORMER
TC	TIME CLOCK
TCP	TOP CONTROL PANEL
TDOD	TIME DELAY ON DE-ENERGIZATION
TDOE	TIME DELAY ON ENERGIZATION
TDR	TIME DELAY RELAY
TEL	TELEPHONE
TNI	TELEPHONE NETWORK INTERFACE
TS	TEMPERATURE SWITCH
TSP	TWISTED SHIELDED PAIR
TST	TWISTED SHIELDED THREE CONDUCTOR (TRIAD)
TYP	TYPICAL
UH	UNIT HEATER
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VAULT
VB	VIBRATION RELAY
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
WHM	WATT HOUR METER
WIL	WHITE INDICATING LIGHT
WP	WEATHER PROOF
WW	WASTE WATER
WWP	WASTE WATER PUMP
XFMR	TRANSFORMER
XP	EXPLOSION PROOF
ZS	LIMIT SWITCH

REFERENCE SYMBOLS

P1	POWER & CONTROL CONDUIT & WIRE TAG, SEE SCHEDULE
C1	CONTROL CONDUIT & WIRE TAG SEE SCHEDULE
S1	SIGNAL CONDUIT & WIRE TAG, SEE SCHEDULE
T1	TELEPHONE CONDUIT & WIRE TAG
SP01	SPARE CONDUIT
1	CONSTRUCTION NOTE
P-01	MECHANICAL EQUIP. DESIGNATION
PSL-101	INSTRUMENT DESIGNATION
XX,XXX AFC	AVAILABLE FAULT CURRENT. PROVIDE EQUIPMENT MEETING OR EXCEEDING

SHEET ON WHICH DETAIL APPEARS — 1 / XX — DETAIL NUMBER — DETAIL AREA

A / XX — SECTION LETTER — SHEET ON WHICH SECTION APPEARS.

30% SUBMITTAL

DRAINAGE MAP #_____

WATER GRID #_____

SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

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DESIGNED BY	DATE
HANNA.GIL	3/14/12
DRAWN BY	DATE
TJP	8/26/10
CHECKED BY	DATE

CITY OF BELLEVUE WASHINGTON

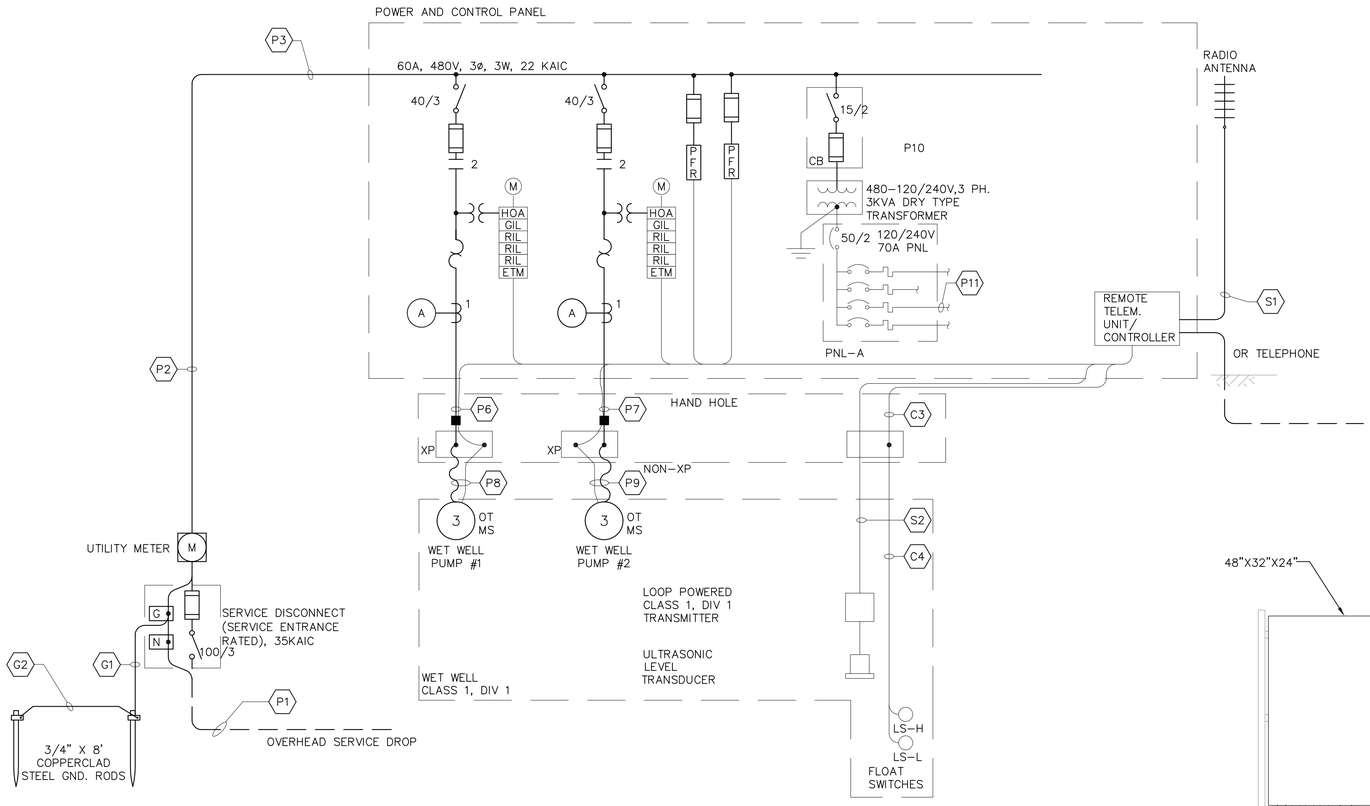
City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT (MEYDENBAUER BAY)

SYMBOLS AND ABBREVIATIONS

SEC 31 TWP 25 RGE 5 | SHT E0 OF 13

I:\D2\I\I21-002 MSA Bell Meydenbauer WWPS_Drawings\I21002-E0.dwg E0 Plot Date: 3/14/2012 1:33 PM Plotted by: HANNA.GIL



ONE–LINE DIAGRAM

SCALE: NONE

BELLEVUE MEYDENBAUER WWPS SERVICE ENTRANCE DEMAND CALCULATIONS

LOAD DESCRIPTION	NOTES	LRA	CODE LETTER (LRA)	HP	KVA	DEMAND LOAD DF	DEMAND LOAD KVA DEMAND	MAXIMUM STARTING CURRENT	
LIFT STATION									
PUMP 1		32	G	3	3.7	1.25	4.6	2.	4.8
PUMP 2		32	G	3	3.7	1	3.7	1	4.8
T1					3	1	3.0	1.	6.3
				HP	KVA		KVA		
	TOTAL			6	10.4		11		
							AMPS		AMPS
TOTAL SYSTEM AMPS AT 480 V 3 PHASE =							14		15.85

1. RUNNING AMP
2. STARTING AMP(LRA)

POWER AND CONTROL PANEL ELEVATION

SCALE: NONE

30% SUBMITTAL

DRAINAGE MAP #_____
WATER GRID #_____
SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

MSA Murray, Smith & Associates, Inc.
Engineers/Planners
2707 Colby Avenue, Suite 1110 PHONE 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853

Approved By

UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

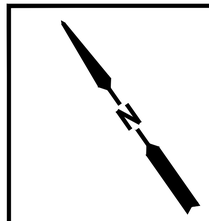
NPH	8/26/10
DESIGNED BY	DATE
HANNA.GIL	3/15/12
DRAWN BY	DATE
TJP	8/26/10
CHECKED BY	DATE

City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

ONE LINE DIAGRAM

SEC 31 TWP 25 RGE 5 SHT E1 OF 13

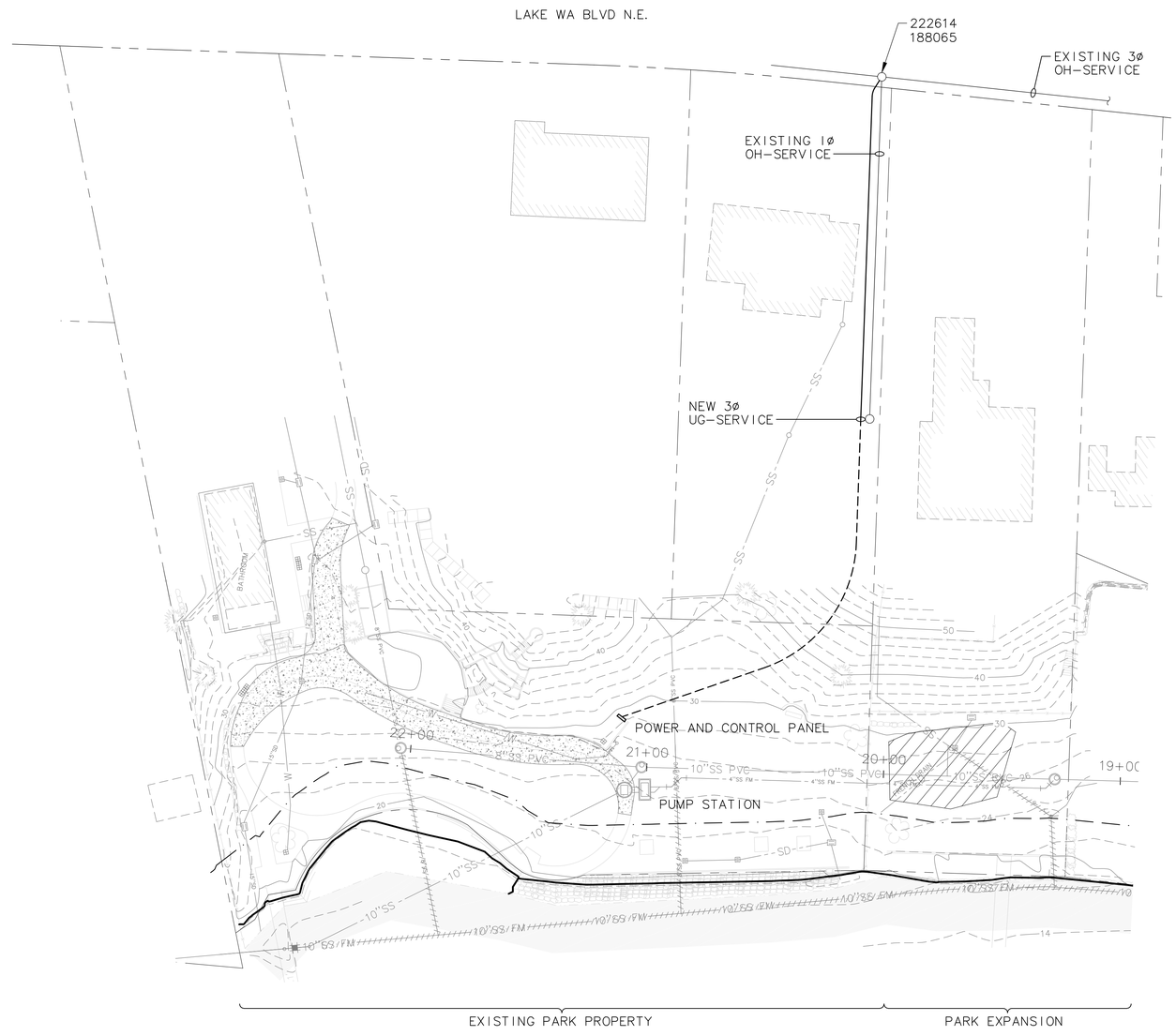


SCALE

10 5 0 10 20

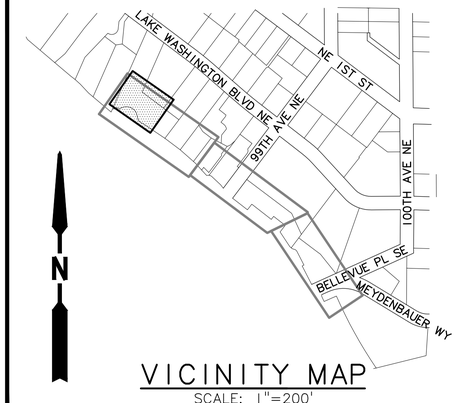
SCALE IN FEET

DATUM BENCHMARK



SITE PLAN

SCALE: 1"=30'



VICINITY MAP

SCALE: 1"=200'

30% SUBMITTAL

DRAINAGE MAP #_____

WATER GRID #_____

SEWER GRID #_____

CASNE ENGINEERING, INC.
ELECTRICAL AND TECHNOLOGY CONSULTANTS
10604 NE 38th PL., SUITE 205 KIRKLAND, WA 98033
(425) 522-1000 WWW.CASNE.COM JOB NO. 1121-002

NO	DATE	BY	APPR	REVISIONS

MSA Murray, Smith & Associates, Inc. Engineers/Planners
2707 Colby Avenue, Suite 1110 PHONE 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853

PRELIMINARY ONLY
DO NOT USE FOR CONSTRUCTION
December 2012
MURRAY, SMITH & ASSOCIATES, INC. Engineers/Planners

Approved By

UTILITIES ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

RAH	3/16/12
DESIGNED BY	DATE
HGG	3/16/12
DRAWN BY	DATE
KLA	3/16/12
CHECKED BY	DATE

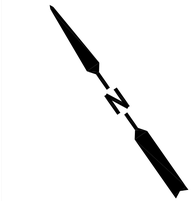
City of Bellevue
UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

ELECTRICAL SITE PLAN

SEC 31 TWP 25 RGE 5 | SHT E2 OF 13

H:\EVT_Projects\09\1088\CAD\Sheets\112002-E2.dwg E2 Plot Date: 12/10/2012 9:13 AM Plotted by: HCM

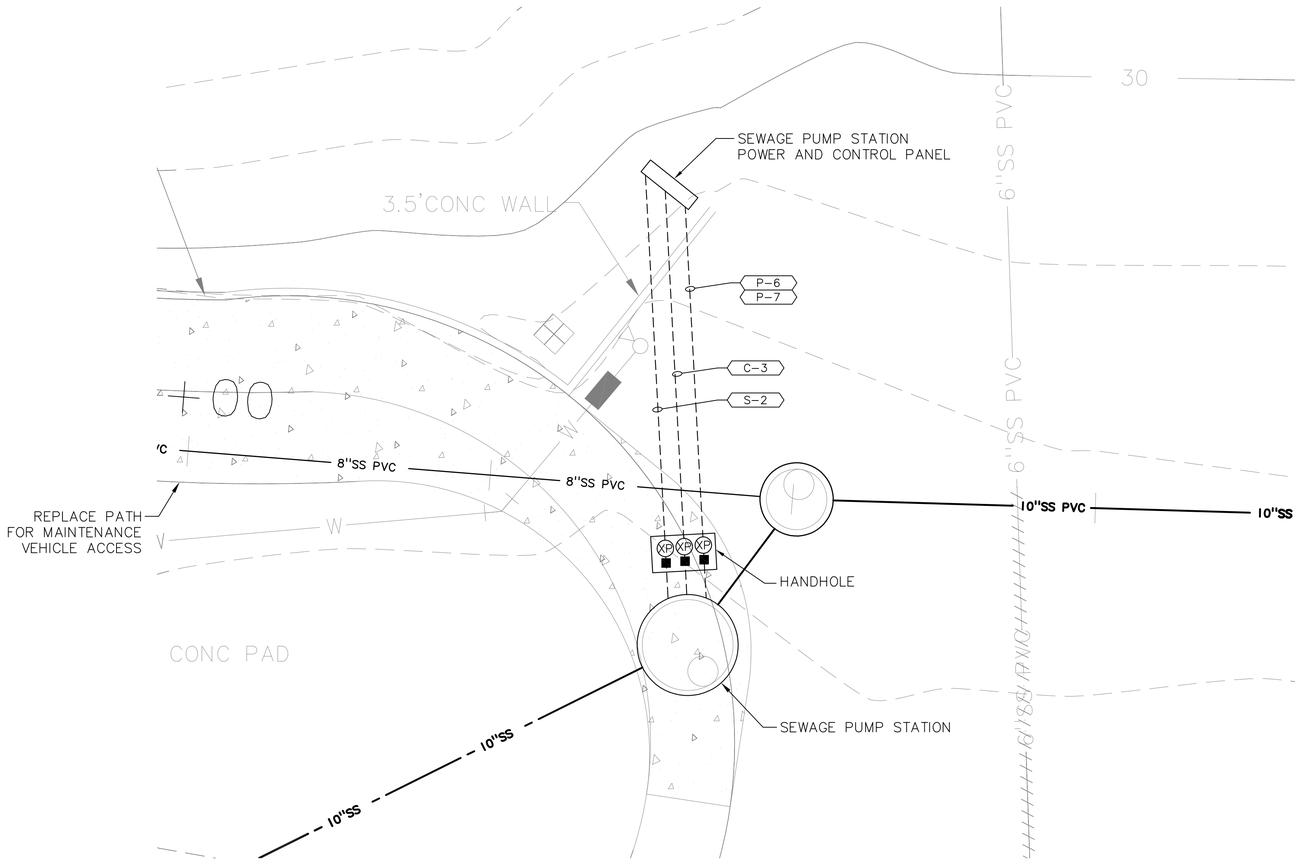


SCALE

10 5 0 10 20

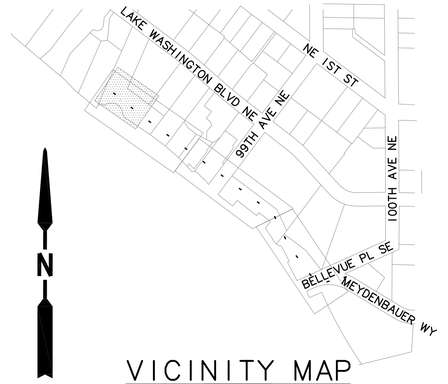
SCALE IN FEET

DATUM BENCHMARK



SITE PLAN

SCALE: 1"=5'



VICINITY MAP

SCALE: 1"=200'

30% SUBMITTAL

DRAINAGE MAP #_____

WATER GRID #_____

SEWER GRID #_____

NO	DATE	BY	APPR	REVISIONS

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CHECKED BY	DATE

City of Bellevue

UTILITIES DEPARTMENT

SEWER LAKE LINE REPLACEMENT PROJECT
(MEYDENBAUER BAY)

PS PLAN & ELEVATION

SEC 31 TWP 25 RGE 5 | SHT E3 OF 13

I:\D2\11\112I-002 MSA Bell Meydenbauer WWPS_Drawings\112I002-E3.dwg E3 Plot Date: 3/15/2012 10:03 AM Plotted by: HANNA.GIL